



2003 SEAM Flame and Gas Product Catalog

Detector Electronics Corporation
T: 952.941.5665 or 800.765.3473
F: 952.839.8750
W: www.detronics.com
E: detronics@detronics.com

Effective January 1, 2003

79-0009-03 SEAM

 **DET-TRONICS**

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2003 Field Service Rate Schedule

Effective January 1, 2003 to December 31, 2003

Rates	Field Service Engineer	Project/Software Engineer
On Site Per Day Rate	\$1,000.00	\$1,200.00
On Site Per Hour Rate	\$125.00	\$150.00
Time and One-Half	\$187.50	\$225.00
Double Time.....	\$250.00	\$300.00
Travel Per Hour Rate	\$90.00	\$100.00

1. Time and one-half applies to all work / travel performed after 8 hours per day or on Saturday.
2. Double time applies to all work/travel performed on Sundays, holidays, and work after 12 continuous hours.
3. Det-Tronics personnel are not required to work more than 12 hours in any 24-hour period.
4. All weekday or weekend travel time is chargeable per the above notes.
5. Eight-hour minimum charge for all one-day service calls with four-hour minimum per day thereafter.
6. Hazardous Duties, Offshore or other duties defined as hazardous (offshore platforms, chemical exposure, etc.) are subject to an additional charge of \$200 per day above the standard daily rate.
7. Work performed in areas with a current US State Department of Transportation Warning of " Not Recommended for Travel for US Citizens" will be invoiced at the "Hazardous Duties" rate. All rates are in U.S. dollars.
8. Field Service time, if put on "hold" at job-site or hotel, will be charged at the regular daily rate.

Detector Electronics Holidays

- New Year's Day, Jan. 1
- Memorial Day, May 26
- Independence Day, July 4
- Labor Day, Sep. 1
- Thanksgiving Day, Nov. 27
- Day after Thanksgiving, Nov. 28
- Christmas Eve Day, Dec. 24
- Christmas Day, Dec. 25
- Day after Christmas, Dec. 26

Workday Defined

The above charges are for a normal eight-hour working day with time and one-half charged for Saturdays, and time over eight (8) hours for a weekday; Sundays and holidays and work after twelve (12) continuous hours will be charged at double time. In addition the travel and living expenses will be billed at cost. Det-Tronics will supply receipts and documentation for the substantiation of reasonable travel and living expenses. These shall include (1) air travel receipt if used, (2) hotel receipt if used, and (3) car rental receipt if used. No other receipts for living expenses will be furnished unless specifically requested by the purchaser in writing prior to the start of the assignment.

Time Sheets

Before the work commences, satisfactory arrangements must be made with Det-Tronics to review and sign Daily Time Sheets. It is suggested that customer submit a written document to Det-Tronics stating whether the customer or their authorized representative will be signing the time sheets. Disputes of any nature should be immediately reported, in writing, to Det-Tronics. Approval and acceptance of the work will be assumed that if no arrangements have been made to sign the time sheets and invoicing will be submitted accordingly. Once signed, the time card is considered as acceptance of the work performed.

Travel Expenses

Airfare	At Cost
Auto Rental	At Cost
Mileage.....	(.36 / mile)
Tolls	At Cost
Parking.....	At Cost

Living Expenses

Motels, meals, etc.	At Cost
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Terms of Payment

Field Service Invoices are due and payable upon receipt. International Field Service is by Letter of Credit or Prepaid (estimated amount).

Abbreviations

AGC/TE	Automatic Gain Control/Thermoelectric Cooler
Al.	Aluminum
amp(s).	ampere/ amperes
appl	application(s)
assy	assembly
Aux	Auxiliary
bd(s).	boards
cal	calibration
CEN	CENELEC (European Committee for Electrochemical Standardization)
config	configuration
COV.	Cone of Vision
cps.	counts per second
Ctrlr	controller
CSA	Canadian Standards Association Certification
DNV	Det Norske Veritas (Norway) approved
ea	each
EC	Electrochemical
Encl	enclosure
EOL	End of Line
EVF.	External Voltage Fluctuation
FM	Factory Mutual Research Corp. approved
ft	foot or feet
Ht.	height
IAO	Individual Alarm Output
Ind	independent
IR	infrared
J-box.	Junction box
LED.	Light Emitting Diode
LEL	Lower Explosive Limit
LFL	Lower Flammable Limit
m	meter(s)
ma	milliampere(s)
mm.	millimeter(s)
mt.	mount
N/C	No Charge
NEC	National Electrical Code
NEMA.	National Electrical Manufacturers Association
No.	number
N.C.	Normally Closed contacts
N.O.	Normally Open contacts
oi.	Optical Integrity
PB	push button
PM	Power Monitor
PLC.	Programmable Logic Controller
ppm	parts per million
OEM.	Original Equipment Manufacturer
p/n.	part number
pos.	positive
R	Russian approved
Repl	replacement

Abbreviations

rly(s)	relay/relays
RUS	Russian approved
SAA	Standard Association of Australia
sec	seconds
sep	separation
sgl	single
SS	Stainless Steel
ULC	Underwriters Laboratories of Canada
STAR	Selectable Transient Arc Rejection
surv	surveillance
TAR	Transient Arc Rejection
TDSA	Time Domain Signal Analysis
temp	temperature
U	ohm
UCR	Upper Count Rate
UL	Underwriter Laboratories
ULC	Underwriter Laboratories of Canada Listed
UV	Ultraviolet
UV/IR	Ultraviolet/Infrared
VDS	Verband deer Sachversicherer (German approval)
w/	with
w/o	without
1/2 inch entry, 3/4 inch entry	NPT conduit entry, unless otherwise stated
20 mm/25 mm entry, or Pg 16	Conduit or cable entry, unless otherwise stated
316SS	316 Stainless Steel

Ordering Information

ORDERING INFORMATION

If unit required is not listed it may be possible to order a special model that better fits the requirements. The manufacturer reserves the right to offer a particular model. Consult factory for pricing and availability.

Detector Electronics Corporation
6901 West 110th Street
Minneapolis, Minnesota 55438 USA

The manufacturer reserves the right to make substitutions or changes to products without notice.

Prices are in U.S. Dollars, Exworks our plant in Minneapolis, Minnesota USA. Prices shown contain no provision for V.A.T. National, State or Local taxes or customs duty that may apply. Prices shown do not contain provision for special export crating. Prices are subject to change without notice. **Prices are effective for shipments after January 1, 2003.**

Terms are Confirmed Letter of Credit with order unless open account terms are established in advance. Invoices to customers with approved credit are payable

30 days net (Domestic) from date of invoice.
35 days net (International) from date of invoice.

A minimum of 20% restocking charge will be applied to all returns. Actual credit will depend on age, condition and potential resale value of returned device. Prior to returning products, contact Detector Electronics Corporation to obtain a Return Material Identification (RMI) number.

REPAIR

Available only for active models listed in this price schedule. **Before returning equipment for repair, contact Detector Electronics Customer Service Department to obtain a Return Material Identification (RMI) number that will be reserved for your specific return order, and referenced in all documentation.** Pack the return shipment carefully to avoid damage in transit. Place RMI number with your name and address as sender, plainly on the outside of the package.

EXPEDITED SHIPMENTS

Any order received (telephone or wire) requesting 24 hour service will be treated as an "expedited shipment". There will be a charge for "expedited shipments" of 1% and a 2% expediting charge for all Counter-to-Counter Rush orders.

WARRANTY POLICY

Detector Electronics Corporation products are manufactured from high quality components and the completed system is rigorously inspected and tested before shipment; however, any electronic device is subject to failure beyond the control of the manufacturer. To ensure system reliability, it is important for the user to maintain the system as recommended by the instruction manuals and to determine the frequency of functional checking of the system required for each specific installation. The more frequent the checking, the greater the system reliability. For the highest reliability, a completely redundant system is necessary.

The manufacturer warrants its products against defective parts and workmanship, and will replace or repair equipment returned to the manufacturer for these reasons within twelve months after date of installation, or eighteen months after date of manufacture, whichever comes first as evidenced by a certification by the installer, and is found by the Company's inspection to be defective in workmanship or materials within the guarantee. In addition, except for oxygen sensors, Detector Electronics warrants all its gas sensors on a two year "rolling" basis. The warranty begins from the date of shipment. This means that if a defective sensor is returned before the two year warranty period has expired, a new sensor will be supplied with the remainder of the original two year warranty applied. For example, a sensor returned after 14 months will be replaced by a new sensor with a ten month warranty). Please note that no other warranty, written or implied, will be honored by the manufacturer.

MINIMUM ORDER: \$50.00

General Terms and Conditions for Sale Contract

All sales by Detector Electronics Corporation (hereinafter called "Detector") of equipment offered and sold by it shall be subject to the following General Terms and Conditions which shall be deemed incorporated into all orders and offers to purchase submitted to Detector for acceptance and into all of its acceptances and contracts for sale.

1. **EXCLUSION OF WARRANTIES.** DETECTOR MAKES NO WARRANTY THAT THE EQUIPMENT SOLD HEREUNDER SHALL BE MERCHANTABLE OR THAT SUCH EQUIPMENT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. MOREOVER, DETECTOR MAKES NO EXPRESS OR IMPLIED WARRANTIES EXCEPT FOR THE LIMITED WARRANTY OUTLINED IN PARAGRAPH 2. IN ADDITION, NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, MADE BY ANY DISTRIBUTOR, SALES REPRESENTATIVE, OR FIELD AGENT OF DETECTOR WHICH IS NOT SPECIFICALLY SET FORTH HEREIN SHALL BE BINDING ON DETECTOR.
2. **WARRANTY.** Detector makes the following limited warranty: Detector warrants to Buyer that the equipment represented by this contract shall be free from defects in material and workmanship upon delivery. If such equipment is not as warranted and if (a) equipment not installed by Detector is received, transportation prepaid, at Detector (i) within eighteen months after date of manufacture, or (ii) within twelve months after date of installation, whichever occurs first as evidenced by a certification by the installer, or (b) equipment installed by Detector, or under the direct supervision of Detector is found by Detector's inspection to be defective in material and workmanship upon delivery within twelve months after date of installation, Detector's liability and Buyer's exclusive remedy against Detector is expressly limited, at Detector's option, to the repair or replacement of the defective good(s), with Detector returning the repaired or replaced good(s) to the Buyer F.O.B. destination at the lowest cost. Any part, item or equipment repaired or replaced and returned to Buyer shall be warranted by Detector for the remainder of the original warranty period. Extended warranty periods are offered for specific detectors and are shown in the notes below.

NOTE #1: Excluding oxygen sensors, Detector warrants that all gas sensors shall be free from defects in material and workmanship upon delivery. This sensor warranty shall be on a two (2) year "rolling basis;" i.e., upon Det-Tronics receipt of a defective gas sensor within/during the two (2) year warranty period, Detector shall provide a new gas sensor, with the remainder of the two (2) year warranty in force. The cost of repair or replacement due to all other defects, including, but not limited to those which are the result of abuse or misuse of the product parts or for a defect which arises out of a design or specification provided by Buyer, shall be at the expense of Buyer.

NOTE #2: The PointWatch PIR9400 and PointWatch Eclipse PIRECL Point Infrared Hydrocarbon Detector warranty for parts and labor shall be five (5) years from the date of manufacture.

NOTE #3: The X3300 and X3301 Multispectrum Infrared Flame Detector warranty for parts and labor shall be five (5) years from the date of manufacture.

NOTE #4: The X2200 Ultraviolet Flame Detector, X5200 UV/IR Flame Detector, and X9800 Single Frequency Infrared Flame Detector warranty for parts and labor shall be three (3) years from the date of manufacture.

Repair or replacement of the Detector equipment as provided in this warranty is the Buyer's exclusive remedy. This exclusive remedy will not be deemed to have failed of its essential purpose so long as Detector is willing and able to repair or replace the defective product in the prescribed manner. If Detector fails to provide Buyer with free repair or replacement as aforesaid, Detector's entire liability shall not exceed the lower of the repair value, the replacement value or the amount paid by Buyer to Detector for the equipment. Detector will not have any liability of any kind under this limited product warranty unless the Buyer notifies Detector within one year after the cause of action has accrued.

This warranty applies only to the equipment delivered which after shipment from Detector's factory have not been altered, changed or repaired in any manner. The products of other manufacturers are covered only by such warranties as made by these original manufacturers even though such items may have been included as components.

3. **LIMITATIONS ON WARRANTY.** IN NO EVENT SHALL DETECTOR OR ITS SUBCONTRACTORS OR VENDORS BE LIABLE IN CONTRACT, TORT, STRICT LIABILITY, WARRANTY, OR OTHERWISE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL LOSS OR DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO DAMAGE TO OR LOSS OF PROPERTY OR EQUIPMENT, LOSS OF ANTICIPATED PROFITS OR REVENUE, CLAIMS OF CUSTOMERS, OR HARM TO GOODWILL OR BUSINESS REPUTATION, LOSS OF USE OF SYSTEM, NON-OPERATION OR INCREASED EXPENSE OF OPERATION OF OTHER EQUIPMENT DIRECTLY OR INDIRECTLY ARISING FROM THE SALE, HANDLING OR USE OF THE EQUIPMENT, OR FROM ANY OTHER CAUSE RELATING THERETO AND DETECTOR'S LIABILITY HEREUNDER. The remedies set forth above and the obligations and liabilities thereunder are exclusive and in lieu of all other remedies, warranties, guarantees or liabilities expressed or implied, arising by law or otherwise including without limitation, any obligations of Detector with respect to merchantability and fitness for a particular purpose/use or whether or not occasioned by Detector's negligence. Detector shall not be liable to the Buyer for any claims, demands, injuries, damages, actions or causes of action whatsoever based on negligence or strict liability.

General Terms and Conditions for Sale Contract

If, after inspection of the returned equipment, Detector determines that the defect is a result of damage, misuse, mishandling, installation, abnormal conditions of storage or operation, unauthorized repair or modification, or due to the Buyer's failure to install, maintain or operate the equipment in compliance with the written instructions, all expenses incurred by Detector in connection with the replacement or repair of the equipment shall be for the account of the Buyer. Any equipment returned to Detector for replacement shall become the property of Detector.

The liability of Detector, its subcontractors or vendors with respect to any contract, or anything done in connection therewith or from the Field Service; Technical Assistance, manufacture, sale delivery, resale, installation, repair, replacement or use of any service or equipment covered by or furnished under this Contract, whether in contract, in tort, in warranty, in strict liability, or otherwise, shall not exceed the original purchase price paid on the contract. If the Contract provides for the furnishing of more than one unit of equipment or materials, the limitation prescribed hereinabove shall be applied to each individual unit with respect to which such breach has occurred and "contract price" shall be deemed to mean the unit price specified in the Contract, or if none is specified, a proportionate part of the total price stipulated for all such units.

The validity, performance and interpretation of the limited warranty shall be governed by the internal laws (and not the laws of conflicts) of the State of Minnesota. All disputes arising in connection with the limited warranty shall be resolved, if not sooner settled, by a court of competent jurisdiction located in Hennepin County, Minnesota, USA.

4. ACCEPTANCE STATES THE ENTIRE CONTRACT. The acknowledgment by Detector of the Buyer's order or offer to purchase is an acceptance of the Buyer's order and intended to embody the complete and exclusive contract of sale in relation to the subject matter hereof, and no understandings or agreements, verbal or otherwise, in relation thereto except as herein expressly set forth or incorporated herein by reference shall be binding on either party.

The acknowledgment by Detector of the Buyer's order(s) is accepted on the condition that the terms and conditions set forth herein shall apply and shall constitute complete agreement and between the parties. Any provisions or conditions of the Buyer's order forms or any verbal or other understandings or agreements which are in any way in conflict with or in addition to these terms and conditions shall not be binding on Detector and shall not be applicable, unless expressly agreed to in writing by Detector herewith or hereafter. Buyer shall be deemed to have assented to the exclusive terms and conditions hereof unless objection by the Buyer hereto in writing has been received by Detector at its office in Minneapolis, Minnesota within ten (10) working days after receipt of the acknowledgment by the Buyer, or if a shipment has been requested in less than said ten (10) working days, then prior to such date shipment, and in the event of such objection and at Detector's option, the acknowledgment shall thereupon be revoked and the sale contract terminated.

5. DELIVERY. Delivery of equipment not agreed on the face hereof to be installed by or under supervision of Detector shall be F.O.B. at Detector's factory, warehouse or office selected by Detector. Shipping dates are approximate and are based upon current and anticipated manufacturing capabilities and upon receipt of all necessary information from the Buyer. Detector reserves the right to make deliver in installments and the contract shall be severable as to each such installment. Delay in delivery or other default in any installment shall not relieve the Buyer of its obligation to accept and pay for remaining deliveries. If delivery of goods is delayed in transit due to default in payment of the purchase price or to delay in receipt of shipping instructions, documents for payment, required inspection, export permit or other cause for which Detector is not responsible, charges for demurrage and storage shall be paid by the Buyer. All claims for a delay in delivery shall be deemed waived unless presented to Detector in writing thirty (30) days after the delivery of each shipment.

Unless otherwise indicated on the front side of the invoice, all shipping and insurance charges, any duty and all taxes related to the Buyer's order shall be paid to the Buyer. Claims for damages in transit must be asserted against the Carrier. Within (7) days after receipt of shipment, the Buyer must report to Detector any shortage or damage not due to the carrier, otherwise claims for such shortage or damage will be deemed waived.

6. FORCE MAJEURE. Fulfillment of this order is contingent upon the availability of materials. Detector shall not be liable for any delays in delivery, or for non-delivery or nonperformance, in whole or in part, caused by the occurrence of any contingency beyond the control of either Detector or suppliers of Detector, including but no limited to one or more of the following causes: fires, destruction of plant; strike; lockout; dispute with workmen; epidemic; flood; accident; delay in transportation; war (whether declared or undeclared); insurrection; riot; blockage; embargo; acts, demands or requirements of the United States, or the country in which or through which delivery is to be made or any state or territory thereof, or of any governmental subdivision of any thereof; restraining orders for decrees of any court or judge; or any other cause whatsoever, whether similar or dissimilar to those herein before enumerated. The existence of any such cause or causes of delay shall extend the time of performance by the time or times measured by any such cause or causes of delay. If delivery is not completed within sixty (60) days after the date stipulated in the acceptance of the order due to any said causes, either Detector or the Buyer may cancel this contract on ten (10) working days notice to the other. If any contingency occurs, Detector reserves the right to allocate production and deliveries among its customers.

General Terms and Conditions for Sale Contract

7. ACCEPTANCE OF ORDERS. Orders and offers to purchase received by or on behalf of Detector are subject to acceptance only at its office in Minneapolis, Minnesota. No Detector distributor, sales representative, or field agent has authority to accept orders or make contracts of sale on behalf of Detector.
8. CANCELLATION, COUNTERMAND AND RETURN OF GOODS. Orders accepted by Detector cannot be cancelled or countermanded, or shipments deferred or equipment returned except with the prior written consent from Detector's office in Minneapolis, Minnesota, and upon terms that will indemnify Detector against all losses resulting therefrom, including the profit on any part of the order that is cancelled. When Detector authorizes the return of equipment, the Buyer shall prepay the shipping charges on such returned equipment unless otherwise expressly stated by Detector in its written return authorization.
9. PRICES, TAXES AND TRANSPORTATION CHARGES. The sales price stipulated in this contract is exclusive of all customs duties, charges or surcharges, consular fees, sale, use, excise, turnover, occupational or transportation taxes, or any other taxes imposed by any country or political subdivision thereof. If any such tax or charge is imposed by law on the Buyer on account of this sale and Detector is obligated to pay such tax or charge, the amount of such disbursement shall be reimbursed to Detector by the Buyer forthwith in addition to the purchase price. Freight and insurance quotations are merely estimates based upon currently prevailing rates and, because Detector has no control over such quotations, any variations in the actual rates at the time of shipment shall be for the Buyer's account. Detector may add a charge for export packing to the price, and Detector reserves the right to impose an additional reasonable charge for packing and/or packaging to comply with Buyer's specifications or instructions.
10. TERMS AND PAYMENT; INSTALLATION CHARGES, FINANCE CHARGES. Absent contrary provision on the face hereof and subject to approval and continuance of approval of credit by Detector, terms of payment are thirty days net from the date of invoice. In the case of equipment for destination outside the United States, terms of payment are by satisfactory confirmed irrevocable Letter of Credit or Sight Draft with documents attached as Detector may elect. All payments shall be in legal currency of the United States. Acceptance and endorsement by Detector of an instrument for less than the full amount which claims to be due shall not be deemed to be an admission of payment in full and any conditions to the contrary which are noted on such an instrument shall not be binding on Detector. Detector's prices prevailing at time of each shipment shall apply. Prices are subject to correction for error.

All costs of installation shall be done by Buyer. It is contemplated that any installation or supervision labor and services agreed on the face hereof to be performed by Detector are to be performed during regular working hours on regular working days. If for any reason the Buyer requests Detector to furnish any such labor or services outside of such regular working hours, any overtime or other additional expense occasioned thereby shall be billed to and paid by the Buyer as an extra.

A finance charge will be assessed on past due amounts at 1 1/2% per month or the highest rate permitted by law whichever is lower.

11. TITLE AND RISK OF LOSS. Unless otherwise indicated on the front side of this document, title to, ownership, and right to possession of the merchandise sold by this contract, and risk of loss, shall pass to the Buyer at the time of delivery to the carrier or Buyer, whichever first occurs. If, however, payment of the purchase price is not contemporaneous with, or does not precede delivery of the merchandise to the carrier or the Buyer, the Buyer agrees at Detector's request to execute, acknowledge and record appropriate financing statements so as to perfect a security interest in the products in favor of Detector, including, but not limited to, a UCC Form 1204 - Retail Installment Contract or the execution of a contract of conditional sale containing the provisions as Detector shall deem proper. If payment of the purchase price is not contemporaneous with, or does not precede delivery of the goods to the carrier or the Buyer, title to the merchandise shall not pass from Detector to the Buyer until payment of the full purchase price.
12. PATENTS. Buyer shall indemnify and hold Detector harmless from any claim of patent infringement if such patent infringement or claim involves machines produced by Detector at Buyer's direction or is based upon the use of the product in combination with other items where such infringement or claim thereof would not have occurred from the normal use for which the product was designed.
13. GENERAL PROVISIONS. Detector reserves the right to correct any stenographical or clerical errors in any of the writings issued by it. Except as otherwise set forth herein, the terms and conditions of sale and any description on the face of this acknowledgement constitute a complete and exclusive statement of the terms and conditions of the sale of the products by Detector to the Buyer. There are no other promises, conditions, understandings, representations or warranties. This Agreement may be modified only in a writing signed by Detector. No waiver of any right will be effective against Detector unless supported by consideration and expressly stated in the writing signed by Detector, and the failure of Detector to enforce any right will not be construed as a waiver of Detector's right to performance in the future. The Buyer may not

General Terms and Conditions for Sale Contract

assign any rights to, or delegate any performance owed under this Agreement without the written consent of Detector. Detector shall have the right to credit toward the payment of any monies that may become due Detector hereunder and any sums which may now or hereafter be owed to the Buyer by Detector. The validity and performance in all matters relating to the interpretation and effect of this Agreement and any amendment hereto shall be governed by and construed in accordance with the internal laws (and not the laws of conflicts) of the State of Minnesota. The Buyer shall pay Detector all fees, costs and expenses of Detector reasonably incurred in the enforcement of Detector's rights under or with respect to this Agreement, including, without limitation, reasonable attorneys' fees.

14. LICENSES AND PERMITS. Buyer shall be solely responsible for obtaining all export licenses or governmental permits necessary to export the products from the United States provided, that at Buyer's request, Detector will endeavor to assist Buyer in obtaining such licenses and permits. Buyer shall be solely responsible for obtaining all import permits or other documents necessary for the importation of the products into another country or political subdivision thereof.
15. ULTIMATE DESTINATION. United States Law prohibits disposition of the equipment to certain countries. It is the responsibility of Buyer to inform Detector of the ultimate destination.
16. NON-DISCLOSURE OF CONFIDENTIAL AND/OR PROPRIETARY TECHNICAL INFORMATION. The Buyer shall not disclose any technical/proprietary information furnished by Detector or acquired by Buyer or by virtue of or as a result of the implementation of this order to any person, firm or body or corporate authority and shall make all endeavors to ensure such technical/proprietary information is kept CONFIDENTIAL. Title to such technical/proprietary information imparted/supplied by Detector to Buyer shall at all times remain the absolute property of Detector.
17. SOFTWARE LICENSE. All software programs which are embodied in a human readable media or machine readable media and which include, but are not limited to, programs having a series of instructions, statements and data, and are related materials furnished by Detector, are trade secrets and proprietary to Detector. Detector provides such programs under a non-transferable and non-exclusive license to use them on the system for which Detector provided it; the Buyer may not assign, sublicense or otherwise transfer said license and programs or materials without the prior written consent of Detector. In the event information/data is exchanged between Detector and the Buyer, both parties mutually agree not to expose said programs to any claim, lien, conversion or any other encumbrance. Detector and the Buyer further agree to exercise due care and employ reasonable efforts to prevent disclosure of said technical information/data/program(s) unless it was or is:
 - [i] Known to the receiving party without restriction when received or thereafter developed independently by the receiving party, or
 - [ii] Obtained from a source other than the originating party, or
 - [iii] In the public domain when received or thereafter enters the public domain through no fault of the receiving party, or
 - [iv] Disclosed by the originating party to a third (3rd) party without restriction.
18. CHANGES. The Buyer may make changes, additions or deletions to specifications, drawings and other descriptions and conditions recited in the related document(s) upon written notice to Detector. If any such change(s), addition(s) or deletion(s) initiated by the Buyer affects the cost of manufacture or time of delivery, Detector shall give the Buyer written notice thereof within two (2) weeks from the date of Buyer's notice, and the Buyer shall give the instruction within a period of two (2) weeks from the date of Buyer's receipt of whether to accept Detector's proposed cost or delivery changes or to withdraw such change(s). In case of withdrawal of change(s), addition(s), deletion(s) during the above period(s), the original contract price and/or delivery shall remain unchanged.

Repair Center and Rental Equipment Pricing

CLASS 1

Repair Charge	\$300
Test Fee	\$150

Plug in Circuit Boards for R73XX Used on
R7300, R7301, R7302, R7303 UV Controllers
K Series Transmitter Used with
Model 1000, 2000, 8000, R8471 Gas Controllers
505 Transmitter Used with CGS Sensors
700 Transmitter. Used with Model 710 H2S Gas Controllers
704 Transmitter. Used with Model 740 H2S Gas Controllers
800 Transmitter Used with Model 810, 820 and 880 Gas Controllers

CLASS 2

Repair Charge	\$250
Test Fee	\$125
005592-PW 4-20ma.....	\$115

Boards for Path and SlickWatch PMW9200, SW9200
R8471 Gas Controllers
R6007 Relay Module
U8810 H2S Controller
W8410 Power Supply
Cal Meter K Series
808 Gas Transmitter
Model 410. H2S Transmitter
W8066. Test Lamp

CLASS 3

Repair Charge	\$600
Test Fee	\$150

U7602 Electronic Package/006605-xxx UV Detector/Controller
U7698A to U7698D Package IR Detector/Controller
U7099 Dual IR Module/Controller
C7052C IR Module/DE5600-001 IR Module
C7052J IR Module IR Module
U7652 IR Module. IR Module
30-2021/E UV Detector
30-2054/A IR Detector
DE5400-001. IR Detector
004161-001 Electronic Module
W8067. Test Lamp
400 Calibration Meter
DE5500-001. Electronic Module
DE6000-001. IR Module
DE4960-001. Electronic Module
DE4933-001. Electronic Module
006598-001 Electronic Module
DE5994-003. Electronic Module
C7050 UV Flame Detector

CLASS 4

Repair Charge	\$700
Test Fee	\$150

400 Gas Detector
405 Gas Detector
410 H2S Detector
415 Gas Detector
U7698E IR Detector
U8700 Gas Controller
U8800 H2S Controller
U9500 Infiniti. Gas Transmitter
Air Dilution Kit Calibration Kit
Mother Brd. for 8000
30-3003/D Smoke Detector
DE2071 Electronics package for U7602B
DE5203 Electronics module for U7652B
W866. Test Lamp
W868. Test Lamp
PIR9400 IR Gas Detector
X3300 IR Flame Detector
U7602A-D UV Flame Detector
U7652 UV/IR Flame Detector
U7602E UV Flame Detector
C7098B IR Flame Detector
X3301 IR Flame Detector
PIRVOL Gas Detector
PointWatch Eclipse IR Gas Detector

CLASS 5

Repair Charge	\$1000
Test Fee	\$200

R6001 Aux. Zone Controller
R7300 UV Controller
R7301 UV Controller
R7302 UV Controller
R7303 UV Controller
R6003 Relay Module
810 Gas Controller
815 Gas Controller
820 Gas Controller
880 Gas Controller
710 H2S Controller
740 H2S Controller
R7404. UV Controller
R7405. UV Controller
R7484 IR Controller
R7094 UV/IR Controller
R7409 UV/IR Controller
R7494 UV/IR Controller
R1425 Detonator

Repair Center and Rental Equipment Pricing

CLASS 5 - Continued

Repair Charge \$1000
Test Fee \$200

R6006 Relay Module
1000 Gas Controller
2000 Gas Controller
8000 Gas Controller
R8460 Gas Controller

CLASS 6 (SPECIALS)

W867 \$800 (Battery Replacement)
PathWatch \$800 (Minimum Charge)
SlickWatch \$800 (Minimum Charge)

BOTH TRANSMITTER AND RECEIVER MUST BE RETURNED FOR PROPER CALIBRATION.

CLASS 7

Eagle Addressable Monitoring System

Test Fee \$200

UV Sensor Module *
Gas Sensor (all) **

* UV sensor modules are typically unable to be repaired. If repairable, the charges will be at actual time and materials.

** Unrepairable.

FACTORY REPAIR PRICING POLICY

In order to provide faster turnaround time on product repairs at our factory in Minneapolis, Detector Electronics has initiated standard or fixed pricing. The standard pricing will apply to groupings of similar products. In order for the program to be successful in providing the shortest repair time, we will be requesting that an authorized purchase order for the amount of the standard pricing be issued prior to our issuing a return authorization number. Please note that no guarantees for repair lead time can be given for product returned without return authorization and an authorized purchase order.

The standard pricing does not apply when a unit is returned for repair and is tested with no defect or problem discovered. A standard test fee will apply for out of warranty units that are tested only. Also, units requiring major component assembly replacement

RENTAL EQUIPMENT RATES

Device	1st Day	Additional Day/s
Test Lamps:		
W867 UV/IR (Explosion Proof)	\$350	\$150
W8067 UV/IR (Long Range)	\$150	\$100
W8066 UV	\$200	\$100
W868 (Use with U7099)	\$250	\$150
Q1201C1001 Laser Aimer with Laser	\$150	\$100
Model 275 HART Communicator	\$350	\$150

Note: First day charge (receipt date) includes overnight shipment to the customer. Additional Day Rate is for every day after day of receipt of rental, excluding the day the rental arrives back at Detector Electronics in Minneapolis. Rental should be returned freight prepaid, overnight service.

such as circuit boards, sensor modules and faceplates etc., will be invoiced at actual time and material costs. Det-Tronics will contact the customer for approval before proceeding if the repair falls out of our standard guidelines. Test fees will be waived if the returned unit is repaired or a replacement purchased.

Typical repair lead times are two to four weeks after receipt. If an expedited repair lead time (one week or less) is required, a \$100.00 expedite fee will be applied to the repair charges.

Standard Pricing: (Freight costs and applicable taxes will be added to invoices at actual costs.)

Any product that does not fall into one of the above classes will be charged at 40 percent of the current list price.

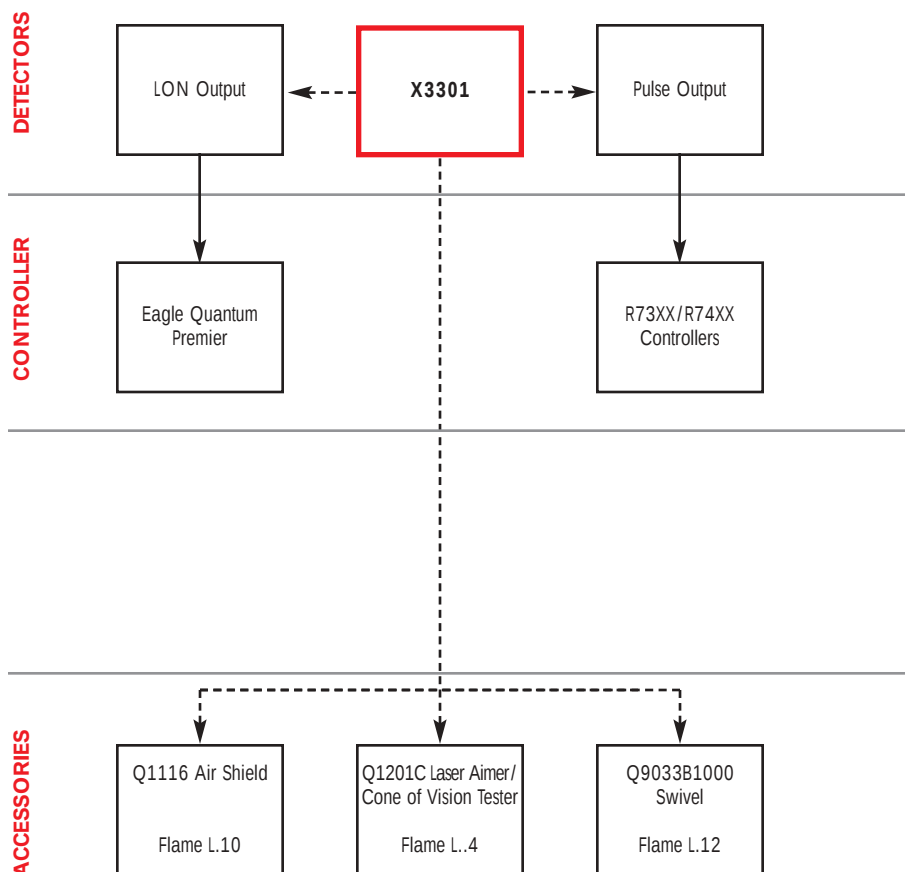
X3301 Protect•IR Multispectrum Infrared Flame Detector



X3301 Protect•IR

X3301 Protect•IR Multispectrum Infrared Flame Detector (Spec Sheet: 90-1145, 90-1144) establishes a new benchmark in multiple-fuel fire detection performance and false alarm rejection. The detector utilizes advanced signal processing algorithms supported by an embedded 32-bit microprocessor to provide continuous protection in the presence of false alarm sources and environments with infrared radiation present. The Long Range version has a detection range of 210 feet to a 1 square foot n-Heptane fire, and is recommended for any indoor/outdoor applications. The Medium Range version has a detection range of 100 feet to a 1 square foot n-Heptane fire, and is recommended for outdoor applications such as offshore oil/gas platforms where flares or other friendly fires are located. The detector is available in aluminum or 316 stainless steel. Standard outputs include fire alarm, auxiliary alarm, and fault relays. Optional 4 to 20 mA output also available. New pulse output for easy retro fitting into controller-based systems.

- Increased sensitivity, certified performance to multiple fuel types
- MTBF of 145,000 hours
- New standard set for cone of vision, 100 feet on and off axis for methane
- Microprocessor controlled heated optics, enable optimal performance in adverse environments
- Data logger for event time and date stamping
- RS485 Modbus output
- Automatic optical integrity check on each sensor
- Calibrated manual testing/mag oi, no test lamp required
- Four conduit entries for easy installation
- CENELEC, FM, CSA , CE, ATEX , DNV, ULC
- Patent number: 5,995,008; 5,804,825; 5,850,182
- Evaluated to meet SIL 2
- Eagle Quantum Premier Compatible



KEY: — = Required - - - - - = Option —●— = Choice Required

X3301 Protect•IR Multispectrum Infrared Flame Detector

X3301 OS Matrix

MODEL	DESCRIPTION
X3301	Multispectrum IR Flame Detector
TYPE	Material
A	Aluminum
S	Stainless Steel (316)
TYPE	THREAD TYPE
4M	4 PORT, METRIC M25
4N	4 PORT, 3/4" NPT
TYPE	OUTPUTS
11	Relay
13	Relay and 4-20mA
14	LON (Eagle Quantum Premier)
15	Relay and Pulse
16	Addressable Module Only (third party type)
21	Relay - Automotive (X3301 only)
TYPE	APPROVAL AGENCY
W	FM/CSA/CENELEC/CE
TYPE	CLASSIFICATION*
1	EEx de
2	EEx d (T4 -55° to +125° C)

*Detectors are always Class I, Div. 1. See Manual.

X3301 Protect•IR Multispectrum Infrared Flame Detector

Part Number *	OS Number	Material	Threads	Output	EE xd Only	FM/CSA/CE/ CENELEC	Ship Weight	Delivery
008100-XXX	X3301A4N11W1	AL	3/4 NPT	Relay		X	6 lb (2.75 kg)	8 weeks
008101-XXX	X3301A4M11W1	AL	25 mm	Relay		X	6 lb (2.75 kg)	8 weeks
008102-XXX	X3301S4N11W1	316 SS	3/4 NPT	Relay		X	10 lb (4.54 kg)	8 weeks
008103-XXX	X3301S4M11W1	316 SS	25 mm	Relay		X	10 lb (4.54 kg)	8 weeks
008104-XXX	X3301A4N11W2	AL	3/4 NPT	Relay	X	X	6 lb (2.75 kg)	8 weeks
008105-XXX	X3301A4M11W2	AL	25 mm	Relay	X	X	6 lb (2.75 kg)	8 weeks
008106-XXX	X3301S4N11W2	316 SS	3/4 NPT	Relay	X	X	10 lb (4.54 kg)	8 weeks
008107-XXX	X3301S4M11W2	316 SS	25 mm	Relay	X	X	10 lb (4.54 kg)	8 weeks
008108-XXX	X3301A4N13W1	AL	3/4 NPT	Relay/4-20 mA		X	6 lb (2.75 kg)	8 weeks
008109-XXX	X3301A4M13W1	AL	25 mm	Relay/4-20 mA		X	6 lb (2.75 kg)	8 weeks
008110-XXX	X3301S4N13W1	316 SS	3/4 NPT	Relay/4-20 mA		X	10 lb (4.54 kg)	8 weeks
008111-XXX	X3301S4M13W1	316 SS	25 mm	Relay/4-20 mA		X	10 lb (4.54 kg)	8 weeks
008120-XXX	X3301A4N13W2	AL	3/4 NPT	Relay/4-20 mA	X	X	6 lb (2.75 kg)	8 weeks
008121-XXX	X3301A4M13W2	AL	25 mm	Relay/4-20 mA	X	X	6 lb (2.75 kg)	8 weeks
008122-XXX	X3301S4N13W2	316 SS	3/4 NPT	Relay/4-20 mA	X	X	10 lb (4.54 kg)	8 weeks
008123-XXX	X3301S4M13W2	316 SS	25 mm	Relay/4-20 mA	X	X	10 lb (4.54 kg)	8 weeks
008124-XXX	X3301A4N14W1	AL	3/4 NPT	Lon/Quantum		X	6 lb (2.75 kg)	8 weeks
008125-XXX	X3301A4M14W1	AL	25 mm	Lon/Quantum		X	6 lb (2.75 kg)	8 weeks
008126-XXX	X3301S4N14W1	316 SS	3/4 NPT	Lon/Quantum		X	10 lb (4.54 kg)	8 weeks
008127-XXX	X3301S4M14W1	316 SS	25 mm	Lon/Quantum		X	10 lb (4.54 kg)	8 weeks
008128-XXX	X3301A4N14W2	AL	3/4 NPT	Lon/Quantum	X	X	6 lb (2.75 kg)	8 weeks
008129-XXX	X3301A4M14W2	AL	25 mm	Lon/Quantum	X	X	6 lb (2.75 kg)	8 weeks
008130-XXX	X3301S4N14W2	316 SS	3/4 NPT	Lon/Quantum	X	X	10 lb (4.54 kg)	8 weeks
008131-XXX	X3301S4M14W2	316 SS	25 mm	Lon/Quantum	X	X	10 lb (4.54 kg)	8 weeks
008112-XXX	X3301A4N15W1	AL	3/4 NPT	Pulse		X	6 lb (2.75 kg)	8 weeks
008113-XXX	X3301A4M15W1	AL	25 mm	Pulse		X	6 lb (2.75 kg)	8 weeks
008114-XXX	X3301S4N15W1	316 SS	3/4 NPT	Pulse		X	10 lb (4.54 kg)	8 weeks
008115-XXX	X3301S4M15W1	316 SS	25 mm	Pulse		X	10 lb (4.54 kg)	8 weeks
008116-005	X3301A4N21W1	AL	3/4 NPT	Automotive		X	6 lb (2.75 kg)	8 weeks
008117-005	X3301A4M21W1	AL	25 mm	Automotive		X	6 lb (2.75 kg)	8 weeks

*The last 3 digits of the part number identify the software configuration. Please see the following table to choose the correct option

X3301 Protect•IR Multispectrum Infrared Flame Detector

X3100 Software Part Number Configuration Matrix

Dash	Sensitivity	Alarm Relay	Aux Relay	Fault Relay	Special
- 001	Medium	De-energized; Non-latching	Energized; Non-latching	Energized; Non-latching	None
- 002	Very High	De-energized; Non-latching	Energized; Non-latching	Energized; Non-latching	None
- 003	Very High	De-energized; Non-latching	Energized; Non-latching	Energized; Non-latching	Quick Fire
- 005	Medium	De-energized; Non-latching	De-energized; Non-latching	Energized; Non-latching	Automotive
- 034	Medium	De-energized; Non-latching	De-energized; Non-latching	Energized; Non-latching	Hangar*
- 035	Very High	De-energized; Non-latching	De-energized; Non-latching	Energized; Non-latching	Hangar*

*Consult Factory For Recommendations

X3301

Application Recommendations:

General Duty	001
Offshore	001
Turbine	001
Compressor	002
High Speed	003
Hangar	002, 034, or 035
Automotive	005

Eagle Quantum Premier

Part Number	OS Number/Description	Material	Approvals	Ship Weight lbs. (kg)	Delivery (Weeks)
007609-003	EQ3000DNNA Controller	AL	FM/CSA/CE	2.0 (0.9)	8
000512-XXX*	S3 Operating Interface Software for up to 24 flame/gas detectors	n/a	n/a	<1.0 (0.45)	1
	Certified Drawings (each)	n/a	n/a		
	Custom configuration (per input/output)	n/a	n/a		

*Consult factory

Custom system configurations available. Please consult factory for details

X9800 IR Flame Detector



X9800 IR Flame Detector

The **X9800 IR Flame Detector** (Spec Sheet: 90-1160) meets the most stringent requirements worldwide with advanced detection capabilities and immunity to extraneous sources, combined with a superior mechanical design. The detector is equipped with both automatic and manual oi test capability. The detector has Division and Zone explosion-proof ratings and is suitable for use in indoor and outdoor applications.

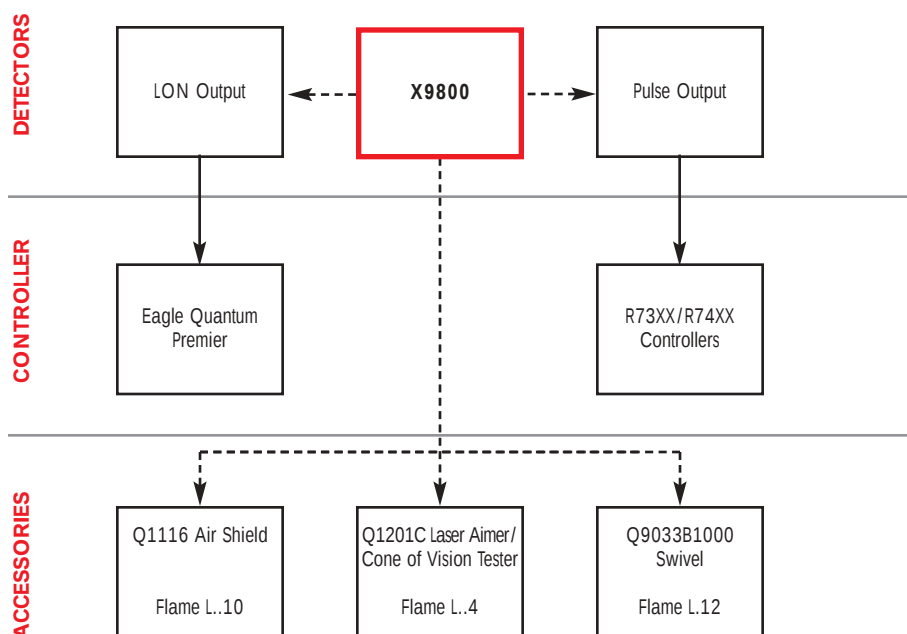
The standard output configuration includes fire, fault and auxiliary relays. An optional 4 to 20 mA output can be provided in addition to the three relays. A model with pulse output is available for easy retrofitting into existing Det-Tronics controller based systems. Auxiliary relay and 4 to 20 mA output are not available with the pulse model. A multi-color LED on the detector faceplate indicates detector status condition.

The X9800 housing is available in aluminum or stainless steel, with NEMA 4X and IP66 rating. Typical applications include: Turbines, petrochemical applications, automotive applications an dirty environments.

- Unequaled false alarm rejection, TDSA.
- Responds to a fire in the presence of modulated blackbody radiation (i.e. heaters, ovens, turbines) without false alarm.
- High speed capability — 40 milliseconds.
- Heated optics for increased resistance to moisture and ice.
- Automatic, manual or magnetic optical integrity (oi) testing.
- Easily replaceable oi plate.
- Fire, fault and auxiliary relays standard.
- 4 to 20 mA isolated output (optional).
- Pulse output for compatibility with controller based systems (optional).
- Tricolor LED indicates normal operation, fire and fault conditions.
- Operates under adverse weather conditions and in dirty environments.
- Mounting swivel allows easy sighting.
- Integral wiring compartment for ease of installation.
- Class A wiring per NFPA-72.
- Meets NFPA-33 response requirement for under 0.5 second (available when model selected).
- Built-in data logging / event monitoring.
- Eagle Quantum Premier Compatible.



X9800



KEY: — = Required - - - - - = Option —●— = Choice Required

Single Frequency Infrared Flame B.1

X9800 IR Flame Detector

X9800 OS Matrix

MODEL	DESCRIPTION												
X9800	Single Frequency IR Flame Detector												
	<table> <tr> <th>TYPE</th><th>MATERIAL</th></tr> <tr> <td>A</td><td>Aluminum</td></tr> <tr> <td>S</td><td>Stainless Steel (316)</td></tr> </table>	TYPE	MATERIAL	A	Aluminum	S	Stainless Steel (316)						
TYPE	MATERIAL												
A	Aluminum												
S	Stainless Steel (316)												
	<table> <tr> <th>TYPE</th><th>THREAD TYPE</th></tr> <tr> <td>4M</td><td>4 PORT, METRIC M25</td></tr> <tr> <td>4N</td><td>4 PORT, 3/4" NPT</td></tr> </table>	TYPE	THREAD TYPE	4M	4 PORT, METRIC M25	4N	4 PORT, 3/4" NPT						
TYPE	THREAD TYPE												
4M	4 PORT, METRIC M25												
4N	4 PORT, 3/4" NPT												
	<table> <tr> <th>TYPE</th><th>OUTPUTS</th></tr> <tr> <td>11</td><td>Relay</td></tr> <tr> <td>13</td><td>Relay and 4-20mA</td></tr> <tr> <td>14</td><td>LON (Quantum)</td></tr> <tr> <td>15</td><td>Relay and Pulse</td></tr> <tr> <td>16</td><td>Addressable Module Only (third party type)</td></tr> </table>	TYPE	OUTPUTS	11	Relay	13	Relay and 4-20mA	14	LON (Quantum)	15	Relay and Pulse	16	Addressable Module Only (third party type)
TYPE	OUTPUTS												
11	Relay												
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	<table> <tr> <th>TYPE</th><th>APPROVAL AGENCY</th></tr> <tr> <td>W</td><td>FM/CSA/CENELEC/CE</td></tr> </table>	TYPE	APPROVAL AGENCY	W	FM/CSA/CENELEC/CE								
TYPE	APPROVAL AGENCY												
W	FM/CSA/CENELEC/CE												
	<table> <tr> <th>TYPE</th><th>CLASSIFICATION</th></tr> <tr> <td>1</td><td>Division/Zone Ex de</td></tr> <tr> <td>2</td><td>Division/Zone Ex d</td></tr> </table>	TYPE	CLASSIFICATION	1	Division/Zone Ex de	2	Division/Zone Ex d						
TYPE	CLASSIFICATION												
1	Division/Zone Ex de												
2	Division/Zone Ex d												

X9800

X9800 Single Frequency IR Flame Detector

Part Number *	OS Number	Material	Threads	Output	EE xd Only	FM/CSA/CE/ CENELEC	Ship Weight	Delivery
008700-XXX	X9800A4N11W1	AL	3/4 NPT	Relay		X	6 lb (2.75 kg)	8 weeks
008701-XXX	X9800A4M11W1	AL	25 mm	Relay		X	6 lb (2.75 kg)	8 weeks
008702-XXX	X9800S4N11W1	316 SS	3/4 NPT	Relay		X	10 lb (4.54 kg)	8 weeks
008703-XXX	X9800S4M11W1	316 SS	25 mm	Relay		X	10 lb (4.54 kg)	8 weeks
008704-XXX	X9800A4N11W2	AL	3/4 NPT	Relay	X	X	6 lb (2.75 kg)	8 weeks
008705-XXX	X9800A4M11W2	AL	25 mm	Relay	X	X	6 lb (2.75 kg)	8 weeks
008706-XXX	X9800S4N11W2	316 SS	3/4 NPT	Relay	X	X	10 lb (4.54 kg)	8 weeks
008707-XXX	X9800S4M11W2	316 SS	25 mm	Relay	X	X	10 lb (4.54 kg)	8 weeks
008708-XXX	X9800A4N13W1	AL	3/4 NPT	Relay/4-20 mA		X	6 lb (2.75 kg)	8 weeks
008709-XXX	X9800A4M13W1	AL	25 mm	Relay/4-20 mA		X	6 lb (2.75 kg)	8 weeks
008710-XXX	X9800S4N13W1	316 SS	3/4 NPT	Relay/4-20 mA		X	10 lb (4.54 kg)	8 weeks
008711-XXX	X9800S4M13W1	316 SS	25 mm	Relay/4-20 mA		X	10 lb (4.54 kg)	8 weeks
008712-XXX	X9800A4N13W2	AL	3/4 NPT	Relay/4-20 mA	X	X	6 lb (2.75 kg)	8 weeks
008713-XXX	X9800A4M13W2	AL	25 mm	Relay/4-20 mA	X	X	6 lb (2.75 kg)	8 weeks
008714-XXX	X9800S4N13W2	316 SS	3/4 NPT	Relay/4-20 mA	X	X	10 lb (4.54 kg)	8 weeks
008715-XXX	X9800S4M13W2	316 SS	25 mm	Relay/4-20 mA	X	X	10 lb (4.54 kg)	8 weeks
008716-XXX	X9800A4N14W1	AL	3/4 NPT	Lon/Quantum			6 lb (2.75 kg)	Call
008717-XXX	X9800A4M14W1	AL	25 mm	Lon/Quantum			6 lb (2.75 kg)	Call
008718-XXX	X9800S4N14W1	316 SS	3/4 NPT	Lon/Quantum			10 lb (4.54 kg)	Call
008719-XXX	X9800S4M14W1	316 SS	25 mm	Lon/Quantum			10 lb (4.54 kg)	Call
008720-XXX	X9800A4N14W2	AL	3/4 NPT	Lon/Quantum	X		6 lb (2.75 kg)	Call
008721-XXX	X9800A4M14W2	AL	25 mm	Lon/Quantum	X		6 lb (2.75 kg)	Call
008722-XXX	X9800S4N14W2	316 SS	3/4 NPT	Lon/Quantum	X		10 lb (4.54 kg)	Call
008723-XXX	X9800S4M14W2	316 SS	25 mm	Lon/Quantum	X		10 lb (4.54 kg)	Call
008724-XXX	X9800A4N15W1	AL	3/4 NPT	Pulse		X	6 lb (2.75 kg)	8 weeks
008725-XXX	X9800A4M15W1	AL	25 mm	Pulse		X	6 lb (2.75 kg)	8 weeks
008726-XXX	X9800S4N15W1	316 SS	3/4 NPT	Pulse		X	10 lb (4.54 kg)	8 weeks
008727-XXX	X9800S4M15W1	316 SS	25 mm	Pulse		X	10 lb (4.54 kg)	8 weeks

*The last 3 digits of the part number identify the software configuration. Please see the following table to choose the correct option

X9800 Software Part Number Configuration Matrix

Dash	IR Sensitivity	Alarm Relay	Quick Fire	Alarm TDSA	Aux Relay	Aux Function	Quick Fire	Aux TDSA	Fault Relay
- 001	High	De-Energized; Non-latching	Off	On	Energized; Non-latching	Follows Alarm	Off	On	Energized; Non-latching
- 002	High	De-Energized; Non-latching	On	On	Energized; Non-latching	Follows Alarm	On	On	Energized; Non-latching
- 003	Very High	De-Energized; Non-latching	On	On	Energized; Non-latching	Follows Alarm	On	On	Energized; Non-latching
- 004	Very High	De-Energized; Non-latching	Off	On	Energized; Non-latching	Follows Alarm	Off	On	Energized; Non-latching
- 005	High	De-Energized; Non-latching	On	On	Energized; Non-latching	Independent	On	Off	Energized; Non-latching
- 006	Low	De-Energized; Non-latching	Off	On	Energized; Non-latching	Follows Alarm	Off	On	Energized; Non-latching

Application Recommendations:

General Duty	001
Offshore	001
Compressor	002
High Speed	003
Hangar	004
Automotive	005
Turbine	006

Eagle Quantum Premier

Part Number	OS Number/Description	Material	Approvals	Ship Weight lbs. (kg)	Delivery (Weeks)
007609-003	EQ3000DNNNA Controller	AL	FM/CSA/CE	2.0 (0.9)	8
000512-XXX*	S3 Operating Interface Software for up to 24 flame/gas detectors	n/a	n/a	<1.0 (0.45)	1
	Certified Drawings (each)	n/a	n/a		
	Custom configuration (per input/output)	n/a	n/a		

*Consult factory

Custom system configurations available. Please consult factory for details

0086X

X5200 UVIR Flame Detector



X5200 UVIR Flame Detector

X5200 UVIR Flame Detector (Spec Sheet: 90-1156) meets the most stringent requirements worldwide with advanced detection capabilities and immunity to extraneous sources, combined with a superior mechanical design. The mounting arrangement allows the UV and IR sensors to monitor the same hazardous location with a 90 degree cone of vision. When both sensors simultaneously detect the presence of a flame, an alarm signal is generated. The detector has Division and Zone explosion-proof ratings and is suitable for use in indoor and outdoor applications.

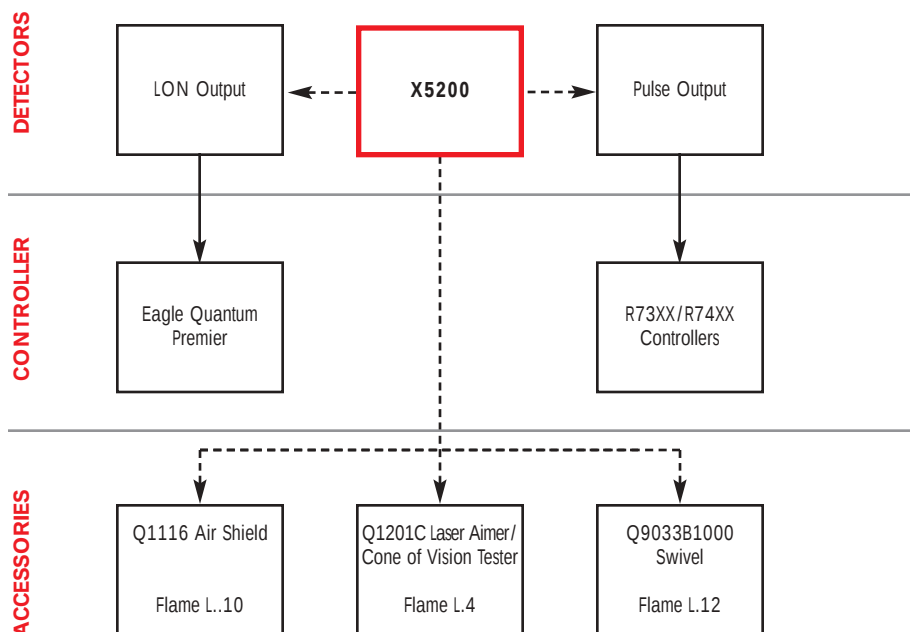
The standard output configuration includes fire, fault and auxiliary relays. An optional 4 to 20 mA output can be provided in addition to the three relays. A model with pulse output is available for easy retrofitting into existing Det-Tronics controller based systems. Auxiliary relay and 4 to 20 mA output are not available with the pulse model. A multi-color LED on the detector faceplate indicates detector status condition.

The X5200 housing is available in aluminum or stainless steel, with NEMA 4X and IP66 rating. Typical applications include: Hangars, munitions, petrochemical applications and turbines.

- New patented signal processing, TDSA, Arc.
- A new level of false alarm rejection.
- Responds to a fire in the presence of modulated blackbody radiation (i.e. heaters, ovens, turbines) without false alarm.
- High speed capability.
- Heated optics for increased resistance to moisture and ice.
- Automatic, manual or magnetic optical integrity (oi) testing.
- Easily replaceable oi plate.
- Fire, fault and auxiliary relays standard.
- 4 to 20 mA isolated output (optional).
- Pulse output for compatibility with controller based systems (optional).
- Tricolor LED indicates normal operation, fire and fault conditions.
- Mounting swivel allows easy sighting.
- Integral wiring compartment for ease of installation.
- Class A wiring per NFPA-72.
- EMI, RFI, EMC Directive Compliant.
- Built-in data logging / event monitoring.
- Eagle Quantum Premier Compatible.



X5200



KEY: — = Required - - - - - = Option —●— = Choice Required

Ultraviolet/Infrared Flame C.1

X5200 UVIR Flame Detector

X5200 OS Matrix

MODEL	DESCRIPTION	
X5200	UV/IR Flame Detector	
	TYPE	MATERIAL
	A	Aluminum
	S	Stainless Steel (316)
	TYPE	THREAD TYPE
	4M	4 PORT, METRIC M25
	4N	4 PORT, 3/4" NPT
	TYPE	OUTPUTS
	11	Relay
	13	Relay and 4-20mA
	14	LON (Quantum)
	15	Relay and Pulse
	16	Addressable Module Only (third party type)
	TYPE	APPROVAL AGENCY
	W	FM/CSA/CENELEC/CE
	TYPE	CLASSIFICATION
	1	Division/Zone Ex de
	2	Division/Zone Ex d

X5200 UVIR Flame Detector

Part Number *	OS Number	Material	Threads	Output	EE xd Only	FM/CSA/CE/ CENELEC	Ship Weight	Delivery
008500-XXX	X5200A4N11W1	AL	3/4 NPT	Relay		X	6 lb (2.75 kg)	8 weeks
008501-XXX	X5200A4M11W1	AL	25 mm	Relay		X	6 lb (2.75 kg)	8 weeks
008502-XXX	X5200S4N11W1	316 SS	3/4 NPT	Relay		X	10 lb (4.54 kg)	8 weeks
008503-XXX	X5200S4M11W1	316 SS	25 mm	Relay		X	10 lb (4.54 kg)	8 weeks
008504-XXX	X5200A4N11W2	AL	3/4 NPT	Relay	X	X	6 lb (2.75 kg)	8 weeks
008505-XXX	X5200A4M11W2	AL	25 mm	Relay	X	X	6 lb (2.75 kg)	8 weeks
008506-XXX	X5200S4N11W2	316 SS	3/4 NPT	Relay	X	X	10 lb (4.54 kg)	8 weeks
008507-XXX	X5200S4M11W2	316 SS	25 mm	Relay	X	X	10 lb (4.54 kg)	8 weeks
008508-XXX	X5200A4N13W1	AL	3/4 NPT	Relay/4-20 mA		X	6 lb (2.75 kg)	8 weeks
008509-XXX	X5200A4M13W1	AL	25 mm	Relay/4-20 mA		X	6 lb (2.75 kg)	8 weeks
008510-XXX	X5200S4N13W1	316 SS	3/4 NPT	Relay/4-20 mA		X	10 lb (4.54 kg)	8 weeks
008511-XXX	X5200S4M13W1	316 SS	25 mm	Relay/4-20 mA		X	10 lb (4.54 kg)	8 weeks
008512-XXX	X5200A4N13W2	AL	3/4 NPT	Relay/4-20 mA	X	X	6 lb (2.75 kg)	8 weeks
008513-XXX	X5200A4M13W2	AL	25 mm	Relay/4-20 mA	X	X	6 lb (2.75 kg)	8 weeks
008514-XXX	X5200S4N13W2	316 SS	3/4 NPT	Relay/4-20 mA	X	X	10 lb (4.54 kg)	8 weeks
008515-XXX	X5200S4M13W2	316 SS	25 mm	Relay/4-20 mA	X	X	10 lb (4.54 kg)	8 weeks
008516-XXX	X5200A4N14W1	AL	3/4 NPT	Lon/Quantum			6 lb (2.75 kg)	Call
008517-XXX	X5200A4M14W1	AL	25 mm	Lon/Quantum			6 lb (2.75 kg)	Call
008518-XXX	X5200S4N14W1	316 SS	3/4 NPT	Lon/Quantum			10 lb (4.54 kg)	Call
008519-XXX	X5200S4M14W1	316 SS	25 mm	Lon/Quantum			10 lb (4.54 kg)	Call
008520-XXX	X5200A4N14W2	AL	3/4 NPT	Lon/Quantum	X		6 lb (2.75 kg)	Call
008521-XXX	X5200A4M14W2	AL	25 mm	Lon/Quantum	X		6 lb (2.75 kg)	Call
008522-XXX	X5200S4N14W2	316 SS	3/4 NPT	Lon/Quantum	X		10 lb (4.54 kg)	Call
008523-XXX	X5200S4M14W2	316 SS	25 mm	Lon/Quantum	X		10 lb (4.54 kg)	Call
008524-XXX	X5200A4N15W1	AL	3/4 NPT	Pulse		X	6 lb (2.75 kg)	8 weeks
008525-XXX	X5200A4M15W1	AL	25 mm	Pulse		X	6 lb (2.75 kg)	8 weeks
008526-XXX	X5200S4N15W1	316 SS	3/4 NPT	Pulse		X	10 lb (4.54 kg)	8 weeks
008527-XXX	X5200S4M15W1	316 SS	25 mm	Pulse		X	10 lb (4.54 kg)	8 weeks

*The last 3 digits of the part number identify the software configuration. Please see the following table to choose the correct option

X5200 UVIR Flame Detector

X5200 Software Part Number Configuration Matrix

Dash	UV Sensitivity	ARC Rejection	IR Sensitivity	Alarm Relay	Quick Fire	Alarm TDSA	Aux Relay	Aux Function	Quick Fire	Aux TDSA	Fault Relay
- 001	High	High	High	De-Energized; Non-latching	Off	On	Energized; Non-latching	Follows Alarm	Off	On	Energized; Non-latching
- 002	High	Very High	High	De-Energized; Non-latching	On	On	Energized; Non-latching	Follows Alarm	On	On	Energized; Non-latching
- 003	High	Off	High	De-Energized; Non-latching	On	On	Energized; Non-latching	UV or IR	Off	Off	Energized; Non-latching
- 004	High	High	Very High	De-Energized; Non-latching	Off	On	Energized; Non-latching	Pre-Alarm	Off	Off	Energized; Non-latching
- 005	Medium	High	High	De-Energized; Non-latching	On	On	Energized; Non-latching	UV or IR	Off	Off	Energized; Non-latching
- 006	High	High	Low	De-Energized; Non-latching	Off	On	Energized; Non-latching	Pre-Alarm	Off	Off	Energized; Non-latching

Application Recommendations:

General Duty	001
Offshore	001
Compressor	002
High Speed	003
Hangar	004
Automotive	005
Turbine	006

Eagle Quantum Premier

Part Number	OS Number/Description	Material	Approvals	Ship Weight lbs. (kg)	Delivery (Weeks)
007609-003	EQ3000DNNNA Controller	AL	FM/CSA/CE	2.0 (0.9)	8
000512-XXX*	S3 Operating Interface Software for up to 24 flame/gas detectors	n/a	n/a	<1.0 (0.45)	1
	Certified Drawings (each)	n/a	n/a		
	Custom configuration (per input/output)	n/a	n/a		

*Consult factory

Custom system configurations available. Please consult factory for details

X5200

X2200 UV Flame Detector



X2200 UV Flame Detector

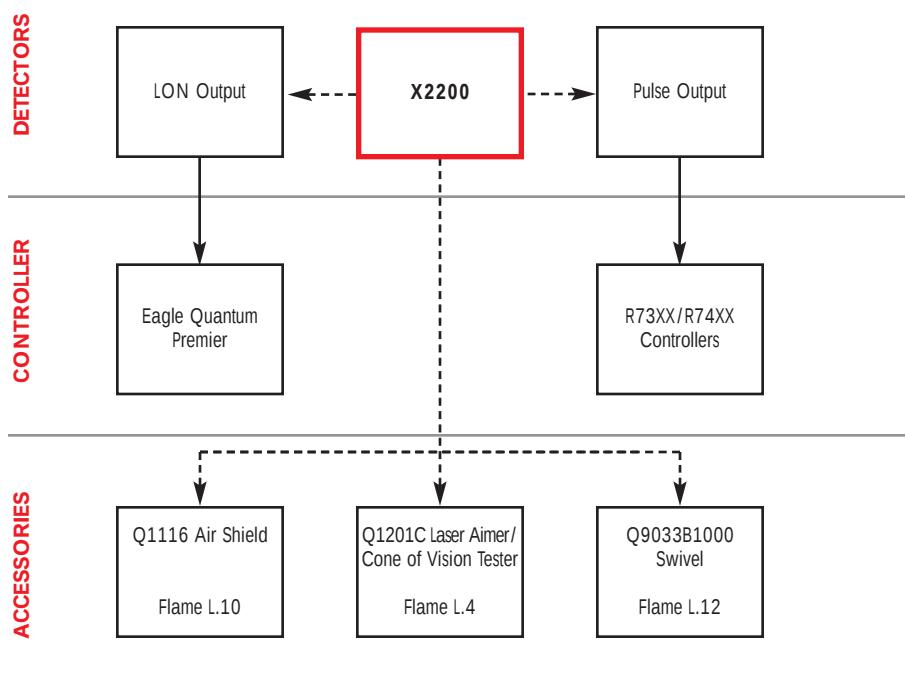
X2200 UV Flame Detector (Spec Sheet: 90-1157) meets the most stringent requirements worldwide with advanced detection capabilities and immunity to extraneous sources, combined with a superior mechanical design. The detector is equipped with both automatic and manual oi test capability. The detector has Division and Zone explosion-proof ratings and is suitable for use in a variety of applications.

The standard output configuration includes fire, fault and auxiliary relays. An optional 4 to 20 mA output can be provided in addition to the three relays. A model with pulse output is available for easy retrofitting into existing Det-Tronics controller based systems. Auxiliary relay and 4 to 20 mA output are not available with the pulse model. A multi-color LED on the detector faceplate indicates detector status condition.

The X2200 housing is available in aluminum or stainless steel, with NEMA 4X and IP66 rating.

Typical applications include: Hydrogen storage, munitions, silane storage and turbines.

- Advanced signal processing.
- Unequaled false alarm rejection, Arc.
- Responds to a fire in the presence of modulated blackbody radiation (i.e. heaters, ovens, turbines) without false alarm.
- High speed capability.
- Automatic, manual or magnetic optical integrity (oi) testing.
- Easily replaceable oi plate.
- Fire, fault and auxiliary relays standard.
- 4 to 20 mA isolated output (optional).
- Pulse output for compatibility with controller based systems (optional).
- Tricolor LED indicates normal operation, fire and fault conditions.
- Mounting swivel allows easy sighting.
- Integral wiring compartment for ease of installation.
- Class A wiring per NFPA-72.
- Meets NFPA-33 response requirement for under 0.5 second (available when model selected).
- EMI, RFI, EMC Directive Compliant.
- Built-in data logging / event monitoring.
- Eagle Quantum Premier Compatible.



X2200

X2200 UV Flame Detector

X2200 OS Matrix

MODEL	DESCRIPTION												
X2200	UV Flame Detector												
	<table> <tr> <th>TYPE</th><th>MATERIAL</th></tr> <tr> <td>A</td><td>Aluminum</td></tr> <tr> <td>S</td><td>Stainless Steel (316)</td></tr> </table>	TYPE	MATERIAL	A	Aluminum	S	Stainless Steel (316)						
TYPE	MATERIAL												
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S	Stainless Steel (316)												
	<table> <tr> <th>TYPE</th><th>THREAD TYPE</th></tr> <tr> <td>4M</td><td>4 PORT, METRIC M25</td></tr> <tr> <td>4N</td><td>4 PORT, 3/4" NPT</td></tr> </table>	TYPE	THREAD TYPE	4M	4 PORT, METRIC M25	4N	4 PORT, 3/4" NPT						
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TYPE	CLASSIFICATION												
1	Division/Zone Ex de												
2	Division/Zone Ex d												

X2200 UV Flame Detector

Part Number *	OS Number	Material	Threads	Output	EE xd Only	FM/CSA/CE/ CENELEC/ ULC	Ship Weight	Delivery
008300-XXX	X2200A4N11W1	AL	3/4 NPT	Relay		X	6 lb (2.75 kg)	8 weeks
008301-XXX	X2200A4M11W1	AL	25 mm	Relay		X	6 lb (2.75 kg)	8 weeks
008302-XXX	X2200S4N11W1	316 SS	3/4 NPT	Relay		X	10 lb (4.54 kg)	8 weeks
008303-XXX	X2200S4M11W1	316 SS	25 mm	Relay		X	10 lb (4.54 kg)	8 weeks
008304-XXX	X2200A4N11W2	AL	3/4 NPT	Relay	X	X	6 lb (2.75 kg)	8 weeks
008305-XXX	X2200A4M11W2	AL	25 mm	Relay	X	X	6 lb (2.75 kg)	8 weeks
008306-XXX	X2200S4N11W2	316 SS	3/4 NPT	Relay	X	X	10 lb (4.54 kg)	8 weeks
008307-XXX	X2200S4M11W2	316 SS	25 mm	Relay	X	X	10 lb (4.54 kg)	8 weeks
008308-XXX	X2200A4N13W1	AL	3/4 NPT	Relay/4-20 mA		X	6 lb (2.75 kg)	8 weeks
008309-XXX	X2200A4M13W1	AL	25 mm	Relay/4-20 mA		X	6 lb (2.75 kg)	8 weeks
008310-XXX	X2200S4N13W1	316 SS	3/4 NPT	Relay/4-20 mA		X	10 lb (4.54 kg)	8 weeks
008311-XXX	X2200S4M13W1	316 SS	25 mm	Relay/4-20 mA		X	10 lb (4.54 kg)	8 weeks
008312-XXX	X2200A4N13W2	AL	3/4 NPT	Relay/4-20 mA	X	X	6 lb (2.75 kg)	8 weeks
008313-XXX	X2200A4M13W2	AL	25 mm	Relay/4-20 mA	X	X	6 lb (2.75 kg)	8 weeks
008314-XXX	X2200S4N13W2	316 SS	3/4 NPT	Relay/4-20 mA	X	X	10 lb (4.54 kg)	8 weeks
008315-XXX	X2200S4M13W2	316 SS	25 mm	Relay/4-20 mA	X	X	10 lb (4.54 kg)	8 weeks
008316-XXX	X2200A4N14W1	AL	3/4 NPT	Lon/Quantum			6 lb (2.75 kg)	Call
008317-XXX	X2200A4M14W1	AL	25 mm	Lon/Quantum			6 lb (2.75 kg)	Call
008318-XXX	X2200S4N14W1	316 SS	3/4 NPT	Lon/Quantum			10 lb (4.54 kg)	Call
008319-XXX	X2200S4M14W1	316 SS	25 mm	Lon/Quantum			10 lb (4.54 kg)	Call
008320-XXX	X2200A4N14W2	AL	3/4 NPT	Lon/Quantum	X		6 lb (2.75 kg)	Call
008321-XXX	X2200A4M14W2	AL	25 mm	Lon/Quantum	X		6 lb (2.75 kg)	Call
008322-XXX	X2200S4N14W2	316 SS	3/4 NPT	Lon/Quantum	X		10 lb (4.54 kg)	Call
008323-XXX	X2200S4M14W2	316 SS	25 mm	Lon/Quantum	X		10 lb (4.54 kg)	Call
008324-XXX	X2200A4N15W1	AL	3/4 NPT	Pulse		X	6 lb (2.75 kg)	8 weeks
008325-XXX	X2200A4M15W1	AL	25 mm	Pulse		X	6 lb (2.75 kg)	8 weeks
008326-XXX	X2200S4N15W1	316 SS	3/4 NPT	Pulse		X	10 lb (4.54 kg)	8 weeks
008327-XXX	X2200S4M15W1	316 SS	25 mm	Pulse		X	10 lb (4.54 kg)	8 weeks

*The last 3 digits of the part number identify the software configuration. Please see the following table to choose the correct option

X2200 UV Flame Detector

X2200 Software Part Number Configuration Matrix

Dash	UV Sensitivity	ARC Rejection	Alarm Relay	Aux Relay	Aux Function	Fault Relay
- 001	High	High	De-Energized; Non-latching	Energized; Non-latching	Follows Alarm	Energized; Non-latching
- 002	High	Very High	De-Energized; Non-latching	Energized; Non-latching	Follows Alarm	Energized; Non-latching
- 003	High	Off	De-Energized; Non-latching	Energized; Non-latching	Pre-Alarm	Energized; Non-latching
- 005	Medium	High	De-Energized; Non-latching	Energized; Non-latching	Follows Alarm	Energized; Non-latching
- 006	High	High	De-Energized; Non-latching	Energized; Non-latching	Pre-Alarm	Energized; Non-latching

Application Recommendations:

General Duty	001
Offshore	001
Compressor	002
High Speed	003
Automotive	005
Turbine	006

Eagle Quantum Premier

Part Number	OS Number/Description	Material	Approvals	Ship Weight lbs. (kg)	Delivery (Weeks)
007609-003	EQ3000DNNA Controller	AL	FM/CSA/CE	2.0 (0.9)	8
000512-XXX*	S3 Operating Interface Software for up to 24 flame/gas detectors	n/a	n/a	<1.0 (0.45)	1
	Certified Drawings (each)	n/a	n/a		
	Custom configuration (per input/output)	n/a	n/a		

*Consult factory

Custom system configurations available. Please consult factory for details

X2200

New Flame Platform Accessories

Part Number	OS Number/Description	Material	Ship Weight	Delivery
000511-029	Converter RS485 to RS232		<1 lb	4 weeks
001680-001	Window cleaner		<1 lb	4 weeks
004431-001	DE4431-001 *automatic oi and three board conversion kit (R7302, R7303)		<1 lb	4 weeks
005003-001	1 oz grease for detectors (non-silicon)		<1 lb	4 weeks
006097-001	Q1201 Laser		<1 lb	4 weeks
007240-001	Q1116A1001, Air Shield	Al	1.5 lb (0.7 kg)	4 weeks
007255-001	Q1201C1001, Laser Aimer	Al/Plastic	1.5 lb (0.7 kg)	4 weeks
007255-002	Q1201C1002, Laser Aimer, Russian	Al/Plastic	1.5 lb (0.7 kg)	4 weeks
007290-001	Q9033B1000 Swivel Assembly	SS	14 lb (6.4 kg)	4 weeks
007307-001	Oi Kit		<1 lb	4 weeks
007338-001	Weather Visor	Plastic	1 lb (0.45 kg)	4 weeks
102740-002	Magnet		<1 lb	4 weeks
102871-001	Laser Battery, 3V Lithium		<1 lb	4 weeks
103363-001	14mm Hex Wrench	Steel	<1 lb	4 weeks
107427-040	O-ring - Rear Cover	Viton	<1 lb	4 weeks
007266-001	X3301 Sensor Mod, Al, EEx de	Al	2 lb	4 weeks
007266-002	X3301 Sensor Mod, Al, EEx d	Al	2 lb	4 weeks
007266-003	X3301 Sensor Mod, SS, EEx de	SS	4 lb	4 weeks
007266-004	X3301 Sensor Mod, SS, EEx d	SS	4 lb	4 weeks
007626-001	X5200 Sensor Mod, Al, EEx de	Al	2 lb	4 weeks
007626-002	X5200 Sensor Mod, Al, EEx d	Al	2 lb	4 weeks
007626-003	X5200 Sensor Mod, SS, EEx de	SS	4 lb	4 weeks
007626-004	X5200 Sensor Mod, SS, EEx d	SS	4 lb	4 weeks
007627-001	X9800 Sensor Mod, Al, EEx de	Al	2 lb	4 weeks
007627-002	X9800 Sensor Mod, Al, EEx d	Al	2 lb	4 weeks
007627-003	X9800 Sensor Mod, SS, EEx de	SS	4 lb	4 weeks
007627-004	X9800 Sensor Mod, SS, EEx d	SS	4 lb	4 weeks
007625-001	X2200 Sensor Mod, Al, EEx de	Al	2 lb	4 weeks
007625-002	X2200 Sensor Mod, Al, EEx d	Al	2 lb	4 weeks
007625-003	X2200 Sensor Mod, SS, EEx de	SS	4 lb	4 weeks
007625-004	X2200 Sensor Mod, SS, EEx d	SS	4 lb	4 weeks

PM-5MP+ Dual Spectrum™ Flame Detector



PM-5MP+

Det-Tronics PM-5MP+ Dual Spectrum™ Flame Detector (Spec Sheet: 90-1135) is optimized for the rigorous semiconductor fabrication industry, which is beset with many hazards that result in stringent and application-specific requirements for fire protection safety systems.

- PM-5MP+ has ten foot detection range
- Complies to FM wet bench performance standards
- Dual Spectrum™ IR design
- Compact size
- LED indicator for operational status
- Built-in mounting plate
- Typical response of 1 second
- Fast response – as fast as 25 milliseconds
- Polypropylene housing: Excellent resistance to corrosion and contamination effects
- Widest temperature range: 32°F to 158°F (0°C to 70°C)
- FM approved for intrinsic safety
- CE marked

PM-5MP+

DETECTOR

PM-5MP+

ACCESSORY

PSS-MP
Test Lamp
Flame F.2

KEY: — = Required - - - - - = Option —●— = Choice Required

Dual Spectrum Infrared Flame F.1

Det-Tronics PM-5MP+ Dual Spectrum™ Flame Detector

PM-5MP+ Dual Spectrum® IR Flame Detector for Semiconductor Fabrication Tools

Part Number	OS Number	Encl Material	Wire Length	FM	Ship Weight	Delivery
420737-000	PM-5MP+ Long Range	Polypropylene	50 ft	X	0.5 lb (0.23 kg)	8 Weeks

Dual Spectrum® Accessories

Part Number	Description	Ship Weight	Delivery
411612-001	24 Volt power supply isolator	1 lb (0.46 kg)	8 Weeks
420116-001	PSS-MP test lamp (PM5, PM5-SX, PM5MP, PM5MP+, PM6M, PM6MX)	1 lb (0.46 kg)	8 Weeks

Det-Tronics PM-9SBE Dual Spectrum™



PM-9SBE

Det-Tronics PM-9SBE Dual Spectrum™ (Spec Sheet: 90-1136) is a fiber optically coupled infrared flame detector that is designed to provide maximum reliability with minimum maintenance in installations that are difficult to monitor using conventional detectors.

The device consists of an optical assembly and an electronic assembly connected by a fiber optic cable. The optical assembly and fiber optic cable can be installed in virtually any hazardous location. This makes the detector highly suitable for protecting inaccessible locations or environments where other detectors could not survive. The fiber optic cable (30, 45, 60 or 100 feet) is resistant to MEK, acetone, and other common solvents.

- Dual wavelength infrared flame detection for false alarm rejection
- Fast 0.5 second response
- Automatic test circuitry ensures proper system function and cable integrity
- Up to 100 foot fiber optic cable length
- Optical assembly and fiber optic cable can be installed in virtually any hazardous location
- Rated as non-incendive and dust-proof
- High temperature fiber optic cable option
- Silicone free
- Compact sensor head design
- Flexible fiber optic cable assembly
- FM approved
- CE marked

DETECTOR

PM-9SBE

ACCESSORIES

PSS-F
Test Lamp
Flame F.4

KEY: — = Required - - - - - = Option —●— = Choice Required

Dual Spectrum Infrared Flame F.3

PM-9SBE

PM-9 Fiber Optic Dual Spectrum® Flame Detector

PM-9SBE

Part Number	OS Number	Encl Material	Conduit Entry	Cable Length	FM	Ship Weight	Delivery
412292-030	PM-9SBE	AL	3/4 in	30 ft	X	1.75 lb (0.8 kg)	8 Weeks
412292-045	PM-9SBE	AL	3/4 in	45 ft	X	1.75 lb (0.8 kg)	8 Weeks
412292-060	PM-9SBE	AL	3/4 in	60 ft	X	1.75 lb (0.8 kg)	8 Weeks
412292-100	PM-9SBE	AL	3/4 in	100 ft	X	1.75 lb (0.8 kg)	8 Weeks

Dual Spectrum® Replacement Parts

Part Number	Description	Ship Weight	Delivery
412291-001	Electronic assembly (PM-9SBE)	2.5 lb (1.2 kg)	8 Weeks
411288-001	Fiber optic cable (30 foot)	2.5 lb (1.2 kg)	8 Weeks
411288-002	Fiber optic cable (45 foot)	2.5 lb (1.2 kg)	8 Weeks
411288-003	Fiber optic cable (100 foot)	2.5 lb (1.2 kg)	8 Weeks
411288-004	Fiber optic cable (60 foot)	2.5 lb (1.2 kg)	8 Weeks
411301-001	Fiber optic sensor head	0.5 lb (0.23 kg)	8 Weeks
411833-001	PSS-F test lamp (PM-9CBE, PM-9SBE)	1 lb (0.46 kg)	8 Weeks

C7093/R7094 High Speed Infrared Flame Detection System



C7093



R7094

The **C7093/R7094 High Speed Infrared Flame Detection System** (Spec Sheet: 90-1028) responds in less than 5 milliseconds to a high intensity flash fire. Designed specifically for applications, such as munitions manufacturing, the C7093/R7094 can trigger high speed extinguishing systems.

- Extremely fast response (under 5 milliseconds) to flash fire
- Remote test feature provides manual test of optical and electrical components and interconnecting wiring
- Can be used with an external disarming circuit
- Provision for a manual external emergency actuation with circuit ("Manual Pull") for any contact closure device (Class B Supervised)
- Electronically supervises external detonator circuit
- Provisions for an optional external power supply for use with solenoid valves, etc.
- Auxiliary solid state outputs make the system compatible with other Det-Tronics systems
- Can be connected to remote "Armed" and "Fault" lamps
- Adjustable cone of vision
- Intrinsically safe design

DETECTORS

C7093

CONTROLLERS

R7094

ACCESSORIES

R1425
Detonator Module
Flame K.3

R6006
Relay Module
Flame K.3

Q4004
Cage
Flame K.1

KEY: — = Required - - - - - = Option —●— = Choice Required

C7093/R7094 High Speed Infrared Flame Detection System

C7093 High Speed Infrared Fire Detector

Part Number	OS Number	Encl Material	Conduit Entry	Cable Length	Ship Weight	Delivery
004083-005	C7093D6010	316 SS	1/2 in	10 ft	2.75 lb (1.24 kg)	16 Weeks
004083-006	C7093D6025	316 SS	1/2 in	25 ft	2.75 lb (1.24 kg)	16 Weeks
004083-101*	C7093D7010	316 SS	1/2 in	10 ft	2.75 lb (1.24 kg)	16 Weeks

* Aliant Tech Special

C7093/R7094

R7094 High Speed Infrared Detection Controller

Part Number	OS Number	Mounting	Ship Weight	Delivery
003703-001	R7094A2001	Rack	4.4 lb (2.0 kg)	16 Weeks

U5005 Smoke Detector



U5005



U5006 Air Duct

U5005 Smoke Detector (Spec Sheet: 90-1101) is a sensitive, yet rugged, state-of-the-art protection device that is designed for classified areas in hazardous industrial and commercial locations. The detector is designed to operate effectively with both slow smoldering and fast-burning fires. Includes an external alarm indicating LED and one set of normally open relay contacts for alarm and one set of normally closed relay contacts for power supervision.

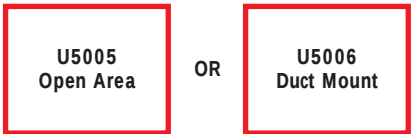
- Trouble-free photoelectric operation
- Standard 4-wire 24 vdc operation (U5006)
- Rugged design for environmental extremes
- Terminal board
- Auxiliary relay
- CSA approved

U5006 Air Duct Smoke Detector (Spec Sheet: 90-1101), using the technology of the U5005 Smoke Detector mounted into a fiberglass NEMA 4 enclosure, is designed to detect the presence of smoke for the primary purpose of controlling blowers and dampers in air conditioning and ventilation systems. The unit mounts directly to heating, ventilating, and air conditioning ducts and uses a cross sectional sampling tube arrangement that allows large volume air sampling. Includes an auxiliary alarm relay contact, which can be normally open or closed.

- Trouble-free photoelectric operation
- Standard 4-wire 24 vdc operation (U5006)
- Designed to meet ANSI/UL 268A smoke obscuration limits
- 600 to 4000 feet per minute airflow range
- Rugged design for environmental extremes
- Terminal board
- Auxiliary relay
- CSA approved

U5005

DETECTORS



KEY: — = Required - - - - - = Option —●— = Choice Required

U5005 Smoke Detector

U5005 Smoke Detector

Part Number	OS Number	Housing Material	J-box Material	Conduit Entry	CSA	RUS	VDS	Ship Weight	Delivery
004784-007	U5005A1001	AL	AL	25 mm*	X	-	X	2 lb (0.91 kg)	4 Weeks
004784-908	U5005A1001-R	AL	AL	25 mm*		X			4 Weeks

* Shipped with 3/4" adapter

U5006 Duct Mount Smoke Detector

Part Number	OS Number	Housing Material	J-box Material	Conduit Entry	Sample Tube	CSA	RUS	VDS	Ship Weight	Delivery
004785-004	U5006A1001	Fiberglass	Al	25 mm*	Specify 1,3,6, or 10 ft	X		X	13 lb (5.91 kg)	8 Weeks
004785-905	U5006A1001-R	Fiberglass	Al	25 mm*	Specify 1,3,6, or 10 ft		X	X	13 lb (5.91 kg)	8 Weeks
007066-001	Kit, Retrofit Smoke Detector	N/A	N/A	25 mm	N/A				6 lb (2.7 kg)	8 Weeks

* Shipped with 3/4" adapter

U5005

Replacement Sample Tubes for U5006

Part Number	OS Number	Length	Delivery
004783-001		1 ft	8 Weeks
004783-002		3 ft	8 Weeks
004783-003		6 ft	8 Weeks
004783-004		10 ft	8 Weeks

Replacement Parts

Part Number	OS Number	Description	Ship Weight	Delivery
004924-002	23-402	Smoke detector head w/fitting (CSA module)	2.5 lb (1.28 kg)	4 Weeks
004788-002		Circuit board for J-box	0.5 lb (0.23 kg)	4 Weeks
102359-001	23-401	Rubber plug for sampling tube	0.5 lb (0.23 kg)	4 Weeks
004783-001		ST-1 Sampling tube, 1 foot length	1 lb (0.46 kg)	4 Weeks
004783-002		ST-3 Sampling tube, 3 foot length	2 lb (0.95 kg)	4 Weeks
004783-003		ST-6 Sampling tube, 6 foot length	4 lb (1.90 kg)	4 Weeks
004783-004		ST-10 Sampling tube, 10 foot length	6 lb (2.90 kg)	4 Weeks
004736-001		RT-1 Return tube, 1 foot length	1 lb (0.46 kg)	4 Weeks

Accessories: Test Lamps

W8066 Portable UV Test Lamp (Spec Sheet: 90-1055) is used for on-site testing of all UV detector types. It replaces W866. Consists of a UV lamp powered by a replaceable 9 volt battery and is contained in a plastic enclosure.



W8066 Portable UV

W867C Portable UV/IR Test Lamp (Spec Sheet: 90-1055) is used for on-site testing of UV, single frequency IR or UV/IR detectors. Consists of a high energy broad band lamp powered by rechargeable batteries and is contained in an explosion proof non-ferrous metallic enclosure.



W867C Portable UV/IR

W8067B Long Range Test Lamp (Manual: 95-8521) for on-site testing of the UV, UV/IR and Single Frequency IR Detectors. NON EXPLOSION-PROOF CANNOT BE USED IN HAZARDOUS LOCATIONS.



W8067B Long Range

Accessories: Test Lamps

W8066 Portable UV Test Lamp

Part Number	OS Number	FM	CSA	RUS	Ship Weight	Delivery
004483-001	W8066A1001	X	X		1.5 lb (0.7 kg)	4 Weeks
004483-901	W8066A1001-R			X	1.5 lb (0.7 kg)	4 Weeks
004520-003	Screw-on red cap for lens				1.5 lb (0.7 kg)	4 Weeks
004648-001	Window, fused silica				1.5 lb (0.7 kg)	4 Weeks

W867 Portable UV/IR Test Lamp

Part Number	OS Number	FM	RUS	Ship Weight	Delivery
004000-003	W867C3001 - 120 VAC	X		14 lb (6.2 kg)	4 Weeks
004000-004	W867C3001 - 220 VAC, 2 Pin EURO	X		14 lb (6.2 kg)	4 Weeks
004000-005	W867C3001 - 220 VAC, 3 Pin UK	X		14 lb (6.2 kg)	4 Weeks
004000-903	W867C3001-R - 220 VAC		X	14 lb (6.2 kg)	4 Weeks
102124-001	Charger, Battery, W867, 120 VAC			1 lb (0.4 kg)	4 Weeks
102124-002	Charger, Battery, W867 & W8067B, 2 PIN 220 VAC, EURO			1 lb (0.4 kg)	4 Weeks
102124-003	Charger, Battery, W867 & W8067B, 3 PIN 220 VAC, UK			1 lb (0.4 kg)	4 Weeks
102123-001	Replacement Bulb			1 lb (0.4 kg)	4 Weeks

W8067 Long Range Test Lamp

Part Number	OS Number	Ship Weight	Delivery
006439-002	W8067B1001	2.0 lb (0.95 kg)	8 Weeks
006438-001	W1212 Battery, Charger and Case	2.0 lb (0.95 kg)	8 Weeks
103154-001	Internal battery for W8067B	2.0 lb (0.95 kg)	8 Weeks
103153-001	Replacement Bulb for W8067B	1.0 lb (0.4 kg)	4 Weeks
102817-001	Replacement Bulb for W8067A	1.0 lb (0.4 kg)	4 Weeks

Accessories: Laser, Laser Holders, W6300 Detector Inspector

Laser Aimer/Cone of Vision Tester is for use with the Q1201 Laser Holder in sighting and testing the area of flame detection coverage. Battery powered laser projects a red beam of light and has a rotary switch for turning the device on and off. When used with its holder, the laser beam identifies the center and edges of the detector's COV. Includes battery.



Laser



Q1201 Laser Holder

Q1201 Laser Holder (Manual: 95-8404) is for use with T2P Laser for sighting and testing area of flame detection coverage. Easily attaches to the front of Det-Tronics' UV, single frequency IR and UV/IR detectors for use during system startup, checkout, and re-alignments. Designed to hold T2P Laser (which projects a red beam of laser light) to show exact location of the center of the detector's COV. Two additional holding positions are available for locating the outside edges of the COV at either 40 degrees off center (80 degrees total COV) or at 45 degrees off center (90 degrees total COV). While laser is being used to locate edges of the COV it can be rotated 360 degrees to identify the entire area of flame detection coverage.



Q1201C Laser Holder

Q1201C Laser Holder is for use with X3301, X2200, X5200, X9800 and X3300.



W6300 Detector Inspector

W6300 Detector Inspector (Manual: 95-8503) for use with X2200, X5200, X9800, U7602E, U7698E, X3301 and U7652B flame detectors with time date fire and fault stamping feature. Software included.

Accessories: Laser, Laser Holders, W6300 Detector Inspector

Laser

Part Number	Description	For Use With	Ship Weight	Delivery
006097-001	Laser Aimer	Q1201A, B, and C	1 lb (0.46 kg)	8 Weeks
102871-001	Battery, 3V Lithium		<1 lb	4 Weeks

Q1201 Laser Holder/Aimer

Part Number	OS Number	For Use With	Ship Weight	Delivery
006066-001	Q1201A1001	UV, IR, UV/IR Detectors	2 lb (0.95 kg)	8 Weeks
006066-002	Q1201B1001	U7099	2 lb (0.95 kg)	8 Weeks
007255-001	Q1201C1001	X3300/X3301/X2200/X5200/X9800	2 lb (0.95 kg)	8 Weeks
007255-002	Q1201C1002	X3300/X3301 - Russian	2 lb (0.95 kg)	8 Weeks

W6300 Inspector

Part Number	OS Number	For Use With	Ship Weight	Delivery
007039-001	W6300A1000 (120 vac)	U7602E, U7698E, U7652	4.15 lb (2 kg)	8 Weeks
007039-002	W6300A1001 (220 vac)	U7602E, U7698E, U7652	4.15 lb (2 kg)	8 Weeks
007039-003	W6300A1002 (120 vac)	X3301/X2200/X5200/X9800	4.15 lb (2 kg)	8 Weeks
007039-004	W6300A1003 (220 vac)	X3301/X2200/X5200/X9800	4.15 lb (2 kg)	8 Weeks

Accessories: Detector Hardware (Air Shields)



Q1113A

Q1113A Universal Air Shield Assembly (Manual: 95-8321). Use on UV, IR and UV/IR detectors (C7050A, B and H, C7051, C7052, C7098, U7600, U7602 and U7698) in areas with high levels of airborne contamination. Consists of delrin (solvent resistant plastic) air shield housing with bronze sintered air diffuser. Quick connect air line fitting accepts 1/4 inch O.D. nylon tubing for instrument grade air supply of 5 to 15 psi at 3 or more cubic feet per minute. Easy to install on existing detectors.



Q1115

Q1115 Universal Air Shield/Flange Mount Assembly. Use on UV and IR detectors (C7050B, C7098, U7600, U7602 and U7698) in areas with high levels of air-borne contaminants. Available in either aluminum housing or stainless steel housing with a sintered air diffuser. Quick connect air line fitting accepts 1/4 inch O.D. nylon tubing for instrument grade air supply of 5 to 15 PSI at 3 or more cubic feet per minute.



Q1116

Q1116 Universal Air Shield/Flange Mount Assembly. Use on X3301, X2200, X5200 and X9800 in areas with high levels of air-borne contaminants. Available in either aluminum housing or stainless steel housing with a sintered air diffuser. Quick connect air line fitting accepts 1/4 inch O.D. nylon tubing for instrument grade air supply of 5 to 15 PSI at 3 or more cubic feet per minute.

Accessories: Detector Hardware (Air Shields)

Q1113 Universal Air Shield Assembly

Part Number	OS Number	Air Connection	Air Supply	Air Requirement	Ship Weight	Delivery
004273-002	Q1113A1001	1/4 in O.D. nylon tubing	5 - 15 psi	3 cfm minimum	1 lb (0.45 kg)	4 Weeks

Q1115 Universal Air Shield / Flange Mount Assembly

Part Number	OS Number	Material	Air Connection	Air Supply	Air Requirement	Ship Weight	Delivery
006528-001	Q1115A1001	SS	1/4 in O.D. nylon tubing	5 - 15 psi	3 cfm minimum	2 lb (0.9 kg)	8 Weeks
006528-002	Q1115A1002	AL	1/4 in O.D. nylon tubing	5 - 15 psi	3 cfm minimum	1 lb (0.45 kg)	8 Weeks

Q1116 Universal Air Shield Assembly

Part Number	OS Number	Air Connection	Air Supply	Air Requirement	Ship Weight	Delivery
007240-001	Q1116A1001	1/4 in O.D. nylon tubing	12 - 20 psi	3 cfm minimum	2 lb (0.9 kg)	4 Weeks

Accessories: Detector Mounting Hardware (Swivels)



Q9001B

Q9001B. Aluminum swivel for positioning the C7050.



Q9001H8

Q9001H8. Stainless steel swivel for positioning the C7050.



Q9001G

Q9001G. Stainless steel swivel for positioning the C7051, C7052 and U7652.



Q9001L

Q9001L. Stainless steel swivel for positioning the U7698E, U7602E and X3300.



Q9033B

Q9033B. Stainless steel swivel for X3301, X2200, X5200 and X9800 with integral junction box.

Detector Mounting Hardware - Swivels

Part Number	OS Number	AI C7050	SS C7050	C7051	C7052	U7652	U7698E	U7602E	X3300	X2200/ X5200/ X9800/ X3301	Ship Weight	Delivery
002099-003	Q9001B1175	X									1.1 lb (0.5 kg)	4 Weeks
004404-002	Q9001H8001		X								1.5 lb (0.7 kg)	4 Weeks
004404-001	Q9001G7001			X	X						1.5 lb (0.7 kg)	4 Weeks
004404-005	Q9001L2002						X	X	X		1.5 lb (0.7 kg)	4 Weeks
007065-001	Q9033A1000*								X		4.0 lb (1.8 kg)	4 Weeks
007290-001	Q9033B1000									X	14 lb (6 kg)	4 Weeks

* For 007059-001, with internal J-Box only.

Accessories: Power Supplies for Ultraviolet Detectors



**W4220A Rack Mount
AC to DC Voltage Converter**

W4220A Rack Mount AC to DC Voltage Converter (Manual: 95-8243). Supplies 24 vdc operating power and is ideally suited for R7404 detection systems and auxiliary devices only. Not recommended for UV/IR systems. Available with either two or four completely independent channels, each fused separately. Each channel is capable of 0.125 amps. Use on either 120 or 220/240 volts 50/60 Hz. Mount in Q4004 Cage Assembly (sold separately).



**000507-005, 000507-006
24 vdc Power Supplies**

000507-005 and 000507-006 24 vdc Power Supplies (Spec Sheet: 90-1035). Open frame construction and designed to operate on 120/240 vac 50/60 Hz to handle the power requirements of IR detection systems, UV/IR detection systems, and larger UV detection systems that typically need higher levels of current than rack mounted voltage converters can deliver. Use in Q1020 Wall Mount enclosures (sold separately) or in other enclosures containing Det-Tronics fire detection equipment. DOES NOT MOUNT INTO THE Q4004 MOUNTING CAGE. Can be used with any controller based or unitized system designed to operate on 24 vdc.

Accessories: Power Supplies for Ultraviolet Detectors

W4220 Rack Mount AC to DC Voltage Converter

Part Number	OS Number	Output Channels	FM	CSA	Ship Weight	Delivery
002386-001	W4220A2004	2	X	X	6.4 lb (2.9 kg)	8 Weeks
002226-001	W4220A4008	4	X	X	6.4 lb (2.9 kg)	8 Weeks

For use with R7404 only

000507-005 and 000507-006 Power Supplies

Part Number	OS Number	Output Rating	Ship Weight	Delivery
000507-005	N/A	24 vdc @ 3.6 amps	6.5 lb (3.0 kg)	4 Weeks
000507-006	N/A	24 vdc @12.6 amps	19.5 lb (8.9 kg)	8 Weeks

U7698E Spare Parts

Part Number	Replaces	Description	Size	per Housing	Ship Weight	Delivery
005994-003	005994-001	Electronics Module	-	-	.5 lb (0.23 kg)	8 Weeks
005994-004	005994-002	Electronics Module w/ 4-20 mA output	-	-	.5 lb (0.23 kg)	8 Weeks
005994-006	N/A	Electronics Module with time and date stamp	-	-	.5 lb (0.23 kg)	8 Weeks
005994-007	N/A	Electronics Module with time and date stamp - High Speed	-	-	.5 lb (0.23 kg)	8 Weeks
003525-001	N/A	O-ring for IR detectors	-	-	.5 lb (0.23 kg)	8 Weeks
107427-004	N/A	Viton O-ring for UV and IR sensor housings	Small	1	.5 lb (0.23 kg)	8 Weeks
107427-040	N/A	Viton O-ring (U7698E rear housings)	Large	1	.5 lb (0.23 kg)	8 Weeks

U7602E Spare Parts

Part Number	Replaces	Description	Ship Weight	Delivery
001680-001		Window Cleaner	.5 lb (0.23 kg)	4 Weeks
002469-001	N/A	DE2189-001 Terminal block for U7602E and C7050	.5 lb (0.23 kg)	8 Weeks
002519-001	N/A	Snap in Oi Ring	.5 lb (0.23 kg)	8 Weeks
003525-001	N/A	Polished Reflector Ring	.5 lb (0.23 kg)	8 Weeks
006605-007	N/A	Electronics module w/4-20 ma	.5 lb (0.23 kg)	8 Weeks
006605-008	N/A	Electronics Module with time and date stamp	.5 lb (0.23 kg)	8 Weeks
006605-009	N/A	Electronics Module with time and date stamp – Highspeed	.5 lb (0.23 kg)	8 Weeks

Replacement Parts for UV/IR Detectors

Part Number	OS Number	Size	Description	Use With	Required per Housing	Ship Weight	Delivery
004431-001	DE4431		Automatic oi and No. 3 board conversion kit	R7302, R7303	1	1 lb (0.45 kg)	4 Weeks
002519-001	N/A		O-ring for UV detectors	UV Detectors	1	.5 lb (0.23 kg)	8 Weeks
003525-001	N/A		O-ring for IR detectors	IR Detectors	1	.5 lb (0.23 kg)	8 Weeks
107427-006	N/A	Small	Viton O-ring for UV and IR sensor housings		2	.5 lb (0.23 kg)	8 Weeks
005197-002	N/A		J-box cover w/o sensor housings	U7652, cast C7052C5, J5, K5	1	1 lb (0.45 kg)	8 Weeks
005197-004	N/A		J-box cover, CENELEC	U7652, cast C7052C5, J5, K5	1	1 lb (0.45 kg)	8 Weeks
004432-001	DE4432-001		Circuit board for cast J-box	C7052J5000, C7052K5000	1	.5 lb (0.23 kg)	8 Weeks
SP005203-002	DE5203		Circuit board for cast J-box	U7652B	1	1 lb (0.45 kg)	8 Weeks
SP005203-003	DE5203		Circuit board for cast J-box	U7652C Auxiliary Relay	1	1 lb (0.45 kg)	8 Weeks
SP005203-004	DE5203		Circuit board for cast J-box	U7652C 4-20 ma output	1	1 lb (0.45 kg)	8 Weeks

Circuit Board Parts for J-boxes

Part Number	For Use With	Description	Ship Weight	Delivery
SP005203-002	U7652B	Replaces 005203-001	0.5 lb (0.23 kg)	8 Weeks
SP005203-003	U7652C3	With auxiliary relay	0.5 lb (0.23 kg)	8 Weeks
SP005203-004	U7652C4	With 4-20 mA	0.5 lb (0.23 kg)	8 Weeks
SP005203-005	U7652B	Form C fault relay	0.5 lb (0.23 kg)	8 Weeks
SP005203-006	U7652B	Time date stamping	0.5 lb (0.23 kg)	8 Weeks

rt

Part Number	Description	Required per Module	Ship Weight	Delivery
001981-001	Banana jacks for UV sensor mounting	4	0.5 lb (0.23 kg)	4 Weeks

UV Sensor Modules

Part Number	OS Number	Comments	Controller	Ship Weight	Delivery
003240-201	DE1888A2	Replaces DE1666A, DE1666C, DE1777A, DE1777C, DE1888A	C7050, C7052	5 oz. (0.23 kg)	4 Weeks
003240-202	DE1888B2	Replaces DE1666B, DE1777B, DE1777D, DE1888D, DE1888B	U7600, U7602, U7652	5 oz. (0.23 kg)	4 Weeks
003240-218	DE1888B3	LED for VDS approved devices	U7602B Only	5 oz. (0.23 kg)	4 Weeks
003240-207	DE1888G2	Nuclear remote surveillance	C7051	5 oz. (0.23 kg)	4 Weeks
003240-210	DE1888K2	Replaces DE1777K, DE1888K, for high temp applications to +125oC (257oF)	C7050B	5 oz. (0.23 kg)	4 Weeks
003240-212	DE1888M2	Replaces DE1777M, DE1888M; for remote surveillance	C7050B	5 oz. (0.23 kg)	4 Weeks
003240-013	DE1888N	For black powder, sulfur fires, etc.(high speed)	C7050B	5 oz. (0.23 kg)	4 Weeks
003240-213	DE1888N2	For special high sensitivity applications (munitions, propellents)	C7050, C7052	5 oz. (0.23 kg)	4 Weeks
004433-201	DE1888T2	For electro painting, spec appl; reduced sensitivity (SF)	C7050B, C7052	5 oz. (0.23 kg)	4 Weeks
003240-220	DE1888U2	High speed - for Utilized detectors	U7602B/E	5 oz. (0.23 kg)	4 Weeks
003240-217	DE1888V2	Internal reflection	C7050B, C7052	5 oz. (0.23 kg)	4 Weeks
003240-219	DE1888V3	Internal reflection, LED	U7652, U7602E	5 oz. (0.23 kg)	4 Weeks
003240-221	DE1888K3	For UVHT only	Quantum	5 oz. (0.23 kg)	4 Weeks
004433-204	DE1888W2	Internal reflection w/reduced sensitivity for remote surveillance	C7050, U7602	5 oz. (0.23 kg)	4 Weeks

Spare Parts

IR Sensor Modules

Part Number	Controller	Sensitivity	Ship Weight	Delivery
003207-001	C7052B, C7052C3	Std	5 oz. (0.23 kg)	4 Weeks
003207-002	C7052B, C7052C3	High	5 oz. (0.23 kg)	4 Weeks
003895-001	C7052J4	Std	5 oz. (0.23 kg)	4 Weeks
003895-002	C7052J4	High	5 oz. (0.23 kg)	4 Weeks
003895-003	C7052K1	Std	5 oz. (0.23 kg)	4 Weeks
003895-004	C7052K1	High	5 oz. (0.23 kg)	4 Weeks
004161-001	U7698A, U7698C	Std	5 oz. (0.23 kg)	4 Weeks
004161-002	U7698A, U7698C	Std	5 oz. (0.23 kg)	4 Weeks
004161-003	U7698A, U7698C	Reduced	5 oz. (0.23 kg)	4 Weeks
004960-001	U7698B	Std	5 oz. (0.23 kg)	4 Weeks
004960-003	U7698B	Reduced	5 oz. (0.23 kg)	4 Weeks
004933-001	U7698D	Std	5 oz. (0.23 kg)	4 Weeks
004933-003	U7698D	Reduced	5 oz. (0.23 kg)	4 Weeks
005400-001*	U7652/C7052J - Replaces 005500-001	Std	5 oz. (0.23 kg)	4 Weeks
005400-004	U7652 with BIT	Std	5 oz. (0.23 kg)	4 Weeks
005500-003	C7052K5	Std	5 oz. (0.23 kg)	4 Weeks
005500-004	C7052J with BIT	Std	5 oz. (0.23 kg)	4 Weeks
005600-001	C7052C5, C7098	Std	5 oz. (0.23 kg)	4 Weeks
005600-002	C7098B, C7052C5	High	5 oz. (0.23 kg)	4 Weeks
006000-001	U7698E	Std	5 oz. (0.23 kg)	4 Weeks

* Replaces 005500-XXX IR Sensors

ID Tags and Drawings

Part Number	Comments	Delivery
N/A	Stainless steel tag with custom text	4 Weeks
N/A	Certified Drawings (per drawing)	4 Weeks

Backplate Terminal Connectors

Part Number	Use With	Replaces	Ship Weight	Delivery
002805-001	R1425	-	1 lb (0.45 kg)	8 Weeks
002296-001	R6006	-	1 lb (0.45 kg)	8 Weeks
003356-001	R6017	-	1 lb (0.45 kg)	8 Weeks
003715-001	R7094	-	1 lb (0.45 kg)	8 Weeks
002242-001	R7404, R7409, R7484, R7494	003551-001, 003957-001	1 lb (0.45 kg)	8 Weeks
002224-001	W4220	-	1 lb (0.45 kg)	8 Weeks

Adapters and Stop Plugs (in numerical order)

Part Number	Description	Entry	Material	Use With	Ship Weight	Delivery
003968-003	One Piece adapter	20 mm	316SS	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
003968-005	One Piece adapter	20 mm	AL	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004084-003	Stop plug		316SS	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004084-004	Stop plug		AL	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004086-003	One Piece adapter	25 mm	316SS	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004086-005	One Piece adapter	25 mm	AL	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004087-003	One Piece adapter	Pg 16	316SS	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004087-005	One Piece adapter	Pg 16	AL	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004088-003	One Piece adapter	1/2 in	316SS	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004088-005	One Piece adapter	1/2 in	AL	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004089-003	One Piece adapter	3/4 in	316SS	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks
004089-005	One Piece adapter	3/4 in	AL	U7600, U7602B, U7698, U7098	5 oz (0.14 kg)	8 Weeks

Miscellaneous Detector Parts for Regular Maintenance (in numerical order)

Part Number	Description	Use With	Ship Weight	Delivery
001680-001	Window cleaner (6)	-	0.5 lb (0.26 kg)	8 Weeks
002507-001	UV window cleaning kit (2 bottles cleaner, 8 oi rings)	K1002A1001	0.5 lb (0.26 kg)	8 Weeks
002519-001	oi ring for UV detectors	-	0.5 lb (0.26 kg)	8 Weeks
003525-001	oi ring for IR detectors	-	0.5 lb (0.26 kg)	8 Weeks
003996-001	UV/IR window cleaning kit (2 bottles cleaner, 4 ea of UV/IR oi rings)	-	0.5 lb (0.26 kg)	8 Weeks
107427-004	Viton O-ring (small) for UV and IR sensor housings	2 per housing	0.5 lb (0.26 kg)	8 Weeks
107427-006	Viton O-ring	-	0.5 lb (0.26 kg)	8 Weeks
107427-007	Viton O-ring	U7600, U7602, U7698, U70988	0.5 lb (0.26 kg)	8 Weeks
107427-040	Viton O-ring	U7698E rear housings	0.5 lb (0.26 kg)	8 Weeks
004231-001	Adapter	C7037	0.5 lb (0.26 kg)	8 Weeks

Accessories: Cages and Enclosures



Q4004
Universal Mounting Cage

Q4004 Universal Mounting Cage (Manual: 95-8241) for use with R6006, R6007, R7094, R7404, R7405, R7409, R7484, R7494, R7495, R1425 and W4220. Also holds R8471 gas controllers.



Q1020
Wall Mount Metal Enclosure

Q1020A Wall Mount Metal Enclosure (Manual: 95-8350) with metric cage assembly rated IP55. Suitable for indoor applications primarily to provide a degree of protection against dust and/or spraying water. Enclosure features a three hinged compartment design, locks, and a front viewing window.

Installation and wiring of backplates at factory to a field wiring terminal strip. Provided are one standard electrical and one mechanical drawing. Additional drawings (i.e. COV layout, detector placement) and engineering provided at our standard rate. Additional enclosure charges will include a pre-wiring fee of \$250 per module slot for R74XX and 8000 controllers or \$125 for all other controllers. NO DISCOUNTS ALLOWED ON THIS CHARGE.

Accessories: Cages and Enclosures

Q4004 Universal Mounting Cages

Cages and Enclosures

Part Number	OS Number	Number of Units	Description	Ship Weight	Delivery
005269-001	Q4004A2019	8	-	9.3 lb (4.2 kg)	4 Weeks
005269-002	Q4004E2027	6	-	7.6 lb (3.5 kg)	4 Weeks
005269-003	Q4004B2011	4	-	5.9 lb (2.7 kg)	4 Weeks
005269-004	Q4004C2009	3	-	5.1 lb (2.3 kg)	4 Weeks
005269-005	Q4004D2007	2	-	4.2 lb (1.9 kg)	4 Weeks
005269-006	Q4004A2050	1	-	3.1 lb (1.4 kg)	4 Weeks
005269-901	Q4004A2019-R*	8	-	9.3 lb (4.2 kg)	4 Weeks
002188-001			Blank filler plates	0.3 lb (1.04 kg)	4 Weeks

*Q4004A2019-R has Russian approvals

Q1020A Wall Mount Enclosures

Part Number	OS Number	Dimensions	Use With	Ship Weight	Delivery
000803-001	Q1020A1001	13" x 24" x 21"	8 flame/16 gas	80 lb (36 kg)	12 weeks
000803-002	Q1020A2001	26" x 24" x 21"	16 flame/32 gas	160 lb (72 kg)	12 weeks

Accessories: Zone and Relay Output Devices for Ultraviolet Detectors



**R1425 Rack Mount
Detonator Module**

R1425 Rack Mount Detonator Module (Spec Sheet: 90-1021) for high speed extinguishing systems. Features two independent capacitive-discharge detonator firing circuits monitored for opens. Use with the R7404 controller. Mounts in Q4004 Cage Assembly (sold separately). Operates on 12 or 24 vdc.



**R6006 Rack Mount
Relay Output Module**

R6006 Rack Mount Relay Output Module (Spec Sheet: 90-1016). Units have eight individual form C relay outputs rated at 3 amps per relay. Relays can be operated by solid state outputs from one R7404, R7409, R7484 or R7494 controller. Zone relays can be grouped for voting outputs. R6006C and R6006D have load monitoring capabilities. Operates on either 12 or 24 vdc. Mounts on Q4004 Cage Assembly (sold separately).



**R6007A Auxiliary
Relay Output Assembly**

R6007A Auxiliary Relay Output Assembly (Spec Sheet: 90-1029). Provides relay contacts actuated by solid state outputs from one R7404, R7409, R7484 or R7494 controller. Four, eight, or twelve relays are supplied on either one or two PC boards. All relays are form C (N.O./N.C.) rated 3 amps at up to 30 vdc or 250 vac. Only one controller per R6007A. Mount on Q4004 Cage Assembly (sold separately). Operates on 12 or 24 vdc. SPECIFY CONTROLLER MODEL AND NUMBER OF RELAYS.

Accessories: Zone and Relay Output Devices for Ultraviolet Detectors

R1425 Rack Mount Detonator Module for the R7404 Controller

Part Number	OS Number	Description	Ship Weight	Delivery
002791-001	R1425A2024	Standard Model	3 lb (1.4 kg)	4 Weeks
002791-002	R1425B3001	Requires "UV" and "Matrix" inputs - Hercules Model	3 lb (1.4 kg)	8 Weeks

Output Devices

R6006 Rack Mount Relay Output Module

Part Number	OS Number	Ind Relays	Alarm Relays	Fault Relays	RUS	Ship Weight	Delivery
002320-001	R6006A2001	6	1	1		4.5 lb (2 kg)	8 Weeks
002321-001	R6006B3004	8				4.5 lb (2 kg)	8 Weeks
002478-002	R6006C1008	6	1	1		4.5 lb (2 kg)	8 Weeks
002479-002	R6006D4009	8				4.5 lb (2 kg)	8 Weeks
002320-901	R6006A2001-R	6	1	1	X	4.5 lb (2 kg)	8 Weeks

R6007 Auxiliary Relay Output Assembly

Part Number	OS Number	Zone Relays	Fire Logic Relays	Common Alarm Relay	Common Fault Relay	Data Strobe Output	RUS	Ship Weight	Delivery
003436-004	R6007A1006	0	A & B	X	X	-	-	2.2 lb (1.0 kg)	8 Weeks
003436-002	R6007A1003	8	-	-	-	-	-	2.2 lb (1.0 kg)	8 Weeks
003436-001	R6007A1002	8	A & B	X	X	-	-	2.2 lb (1.0 kg)	8 Weeks
003436-015	R6007A1009	0	B Only	X	X	X	-	2.2 lb (1.0 kg)	8 Weeks
003436-014	R6007A1008	8	B Only	X	X	X	-	2.2 lb (1.0 kg)	8 Weeks
003436-901	R6007A1002-R	8	1	X	X	-	X	2.2 lb (1.0 kg)	8 Weeks

U7652 UV/IR Flame Detection



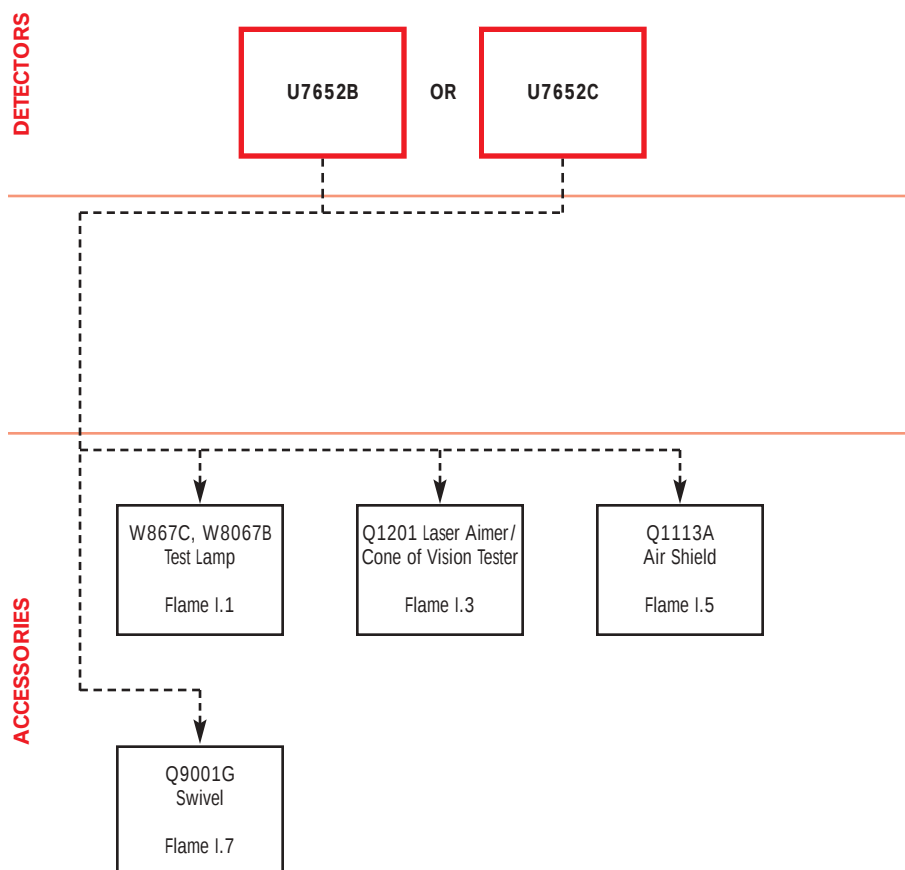
U7652

The **U7652 UV/IR Flame Detection** (Spec Sheet: 90-1080) is a family of unitized fire detection devices that incorporate all detection, signal-processing, and switching components in a single explosion-proof enclosure. They are designed to provide reliable fire protection in applications where the use of either UV or IR detectors alone could result in false alarms.

The microprocessor based **U7652B** contains both a UV and a single frequency IR sensor within a single detector and requires simultaneous response of both sensors to actuate the fire alarm relay. These two detecting elements monitor different portions of the radiation spectrum and have virtually no common sources of false alarms. The detector is able to respond to a real fire while potential false alarm sources such as arc welding, x-rays, or hot vibrating objects are present.

The **U7652C** provides a third (auxiliary) programmable relay field for operating in response to either UV radiation only or IR radiation only. It provides a 4 to 20 mA dc current output. Specific current output levels indicate system status conditions such as normal operation, system fault, UV only, IR only, instant and time delayed flame detection.

- Fire response even when UV or IR false alarm sources are present
- Relay outputs for fire and fault signals
- Selectable latching or non-latching alarm output
- Selectable 0.5 or 3 second response time
- LED indicates normal status, fire, fault, UV and/or IR conditions
- Selectable automatic and/or manually initiated **o i** test
- Suitable for Style D (Class A) wiring
- Time date fire and fault event logging
- CSA, CENELEC and Russian certified
- CE marked



KEY: — = Required - - - - - = Option ● = Choice Required

U7652 UV/IR Flame Detectors with Standard EXTERNAL Optical Integrity

U7652 UV/IR Flame Detection

Part Number	OS Number	Encl Material	Conduit Entry	Relay Output	Aux/Relay Output	High Temp	4-20 mA	Data Logger	Tube Module	IR Module	CSA	CEN	RUS	Ship Weight	Delivery
006969-003	U7652BA6D1B11S1W	AL	25 mm	X					DE1888B2	DE5400-001	X	X		4.8 lb (2.2 kg)	8 Weeks
006969-004	U7652BS6D1B11S1W	SS	25 mm	X					DE1888B2	DE5400-001	X	X		7.8 lb (3.5 kg)	16 Weeks
006969-007	U7652CA6D2B11S1W	AL	25 mm	X			X		DE1888B2	DE5400-001	X	X		4.8 lb (2.2 kg)	8 Weeks
006969-008	U7652CS6D2B11S1W	SS	25 mm	X			X		DE1888B2	DE5400-001	X	X		7.8 lb (3.5 kg)	16 Weeks
006969-011	U7652CA6D5B11S1W	AL	25 mm	X	X				DE1888B2	DE5400-001	X	X		4.8 lb (2.2 kg)	8 Weeks
006969-012	U7652CS6D5B11S1W	SS	25 mm	X	X				DE1888B2	DE5400-001	X	X		7.8 lb (3.5 kg)	16 Weeks
006969-015	U7652BA6D1B11F1W**	AL	25 mm	X					DE1888B2	DE5400-001	X	X		4.8 lb (2.2 kg)	8 Weeks
006969-021	U7652BA6D7B11S1W	AL	25 mm	X				X	DE1888B2	DE5400-001	X	X		4.8 lb (2.2 kg)	8 Weeks
006969-023	U7652BS6D7B11S1W	SS	25 mm	X				X	DE1888B2	DE5400-001	X	X		7.8 lb (3.5 kg)	16 Weeks
006969-016	U7652BA6D1B11S1R	AL	25 mm	X					DE1888B2	DE5400-001		X	X	4.8 lb (2.2 kg)	8 Weeks
006969-017	U7652BS6D1B11S1R	SS	25 mm	X					DE1888B2	DE5400-001		X	X	7.8 lb (3.5 kg)	16 Weeks
006969-018	U7652CA6D2B11S1R	AL	25 mm	X			X		DE1888B2	DE5400-001		X	X	4.8 lb (2.2 kg)	8 Weeks
006969-019	U7652CS6D2B11S1R	SS	25 mm	X			X		DE1888B2	DE5400-001		X	X	7.8 lb (3.5 kg)	16 Weeks
006969-026	U7652BS6D1B11H1W***	SS	25 mm	X		X			DE1888B2	DE5400-001	X	X		7.8 lb (3.5 kg)	16 Weeks
006969-027	U7652BA6D1B11H1W***	AL	25 mm	X		X			DE1888B2	DE5400-001	X	X		4.8 lb (2.2 kg)	8 Weeks

All models listed are preset for Latching, Automatic Oi, 3 second response

** Form C fault relay

*** 125 degree Celsius explosion-proof rating and intermittent operation for up to 3 hours maximum. Designed for turbine applications.

Eagle Quantum UV/IR Flame Detection System

Eagle Quantum UV/IR Flame Detection System (Spec Sheet: 90-1139) is a new off-the-shelf addressable system factory configured with pre-loaded software programming for easy installation.

The system is based on innovative technology and is an alternative to traditional R7400 series controller-based UV/IR systems. This system offers additional features and options not available in controller based systems. The System is offered in four configurations (all include a metal cabinet for housing the LCU and LIOU):

- Controller (LCU) for use with 1 to 24 UV/IR detectors.
- Controller (LCU) and LIOU with 8 relay outputs for use with 1 to 8 UV/IR detectors.
- Controller (LCU) and LIOU with 16 relay outputs for use with 9 to 16 UV/IR detectors.
- Controller (LCU) and LIOU with 24 relay outputs for use with 17 to 24 UV/IR detectors.

The basic Controller (LCU) configuration comes with a common Fire Alarm, Voting 2 of X and Fault output as well as common alarm contacts in groups of 4 or 8.

The optional LIOU furnishes individual Fire Alarm contacts for each detector.

UV/IR detectors are available in Standard Temperature and Intermittent Duty High Temperature.

Additional features include: fault tolerant communications loop, device memory for alarm logging, built-in diagnostics and RS232 serial output with Modbus protocol. Complies with EU CE mark and NFPA-72 when used with optional battery supply/monitor/batteries.

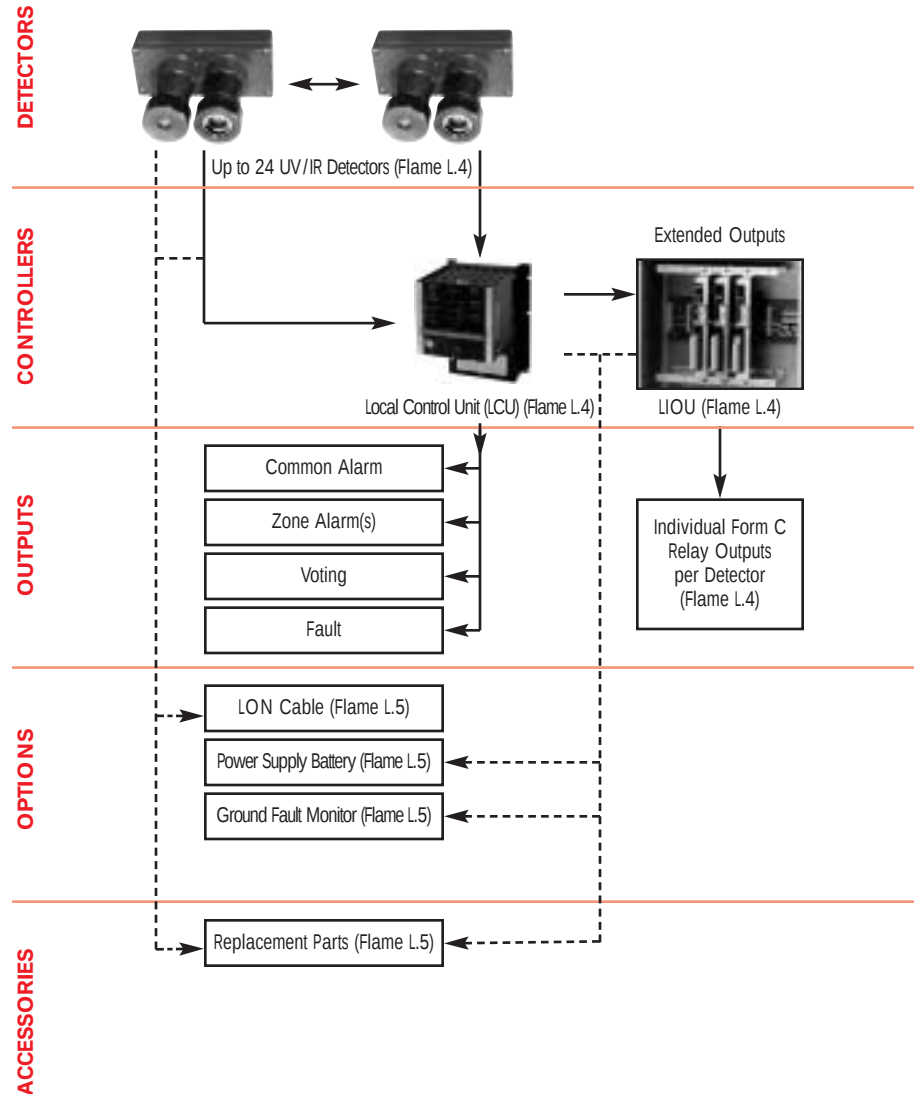
Optional Power Supplies/Battery Charger, Batteries and Battery cabinet; and Power Supply/Ground fault monitors available (See options).

- Contains LCU and optional LIOU
- Terminal strip for Power distribution and LCU outputs.
- Seamless Red Painted Steel
- Wall mountable
- 24in X 24in X 12in D.
- Key lockable door latch
- Hinged/lockable window for access to reset and silence functions



NEMA 4 / IP-55 Enclosure

Eagle Quantum



KEY: — = Required - - - - - = Option —●— = Choice Required

Ultraviolet/Infrared Flame L.3

Eagle Quantum UV/IR Flame Detection System



Eagle Quantum System Cabinets and Equipment

Part Number	OS Number	Description	Shipping Weight
000830-001	-	Eagle Quantum System Cabinet with LCU	45.0 LB (21 KG)
000830-002	-	Eagle Quantum System Cabinet with LCU, LIOU and 2 Relay Cards (8 outputs)	60.0 LB (28 KG)
000830-003	-	Eagle Quantum System Cabinet with LCU, LIOU and 4 Relay Cards (16 outputs)	70.0 LB (32 KG)
000830-004	-	Eagle Quantum System Cabinet with LCU, LIOU and 6 Relay Cards (24 outputs)	80.0 LB (36 KG)



UV/IR Flame Detectors

Part Number	OS Number	Description	Shipping Weight
006861-002	EQ2204UV/IR	Quantum UV/IR Detector, AL, M25, CE, CSA, CENELEC	5.0 LB (2.3 KG)
006861-006	EQ2234UV/IR	Quantum UV/IR Detector, AL, M25, CE, CSA, CENELEC, Hi Temp. *	5.0 LB (2.3 KG)
006861-004	EQ2214UV/IR	Quantum UV/IR Detector, SS, M25, CE, CSA, CENELEC	10.0 LB (4.5 KG)
006861-008	EQ2244UV/IR	Quantum UV/IR Detector, SS, M25, CE, CSA, CENELEC, Hi Temp. *	10.0 LB (4.5 KG)
004404-001	Q9001G7001	Swivel, SS	1.5 LB (0.7 KG)

NOTE: * Hi Temp Detectors shown above are for intermittent (3 hour max.) duty at elevated temperatures

Options

Part Number	OS Number	Description	Shipping Weight
		Suggested LON Cable (verify with project specification for suitability)	
000147-127	-	EQ LON Cable, Shielded 16 AWG, 600 volt, Belden 8719	.25 LB/FT (.11 KG)
		Power Supply/Battery Charger and Accessories	
000604-013	EQ2110PS	Power Supply/Battery Charger, 10 Amp, 120 Vac input, 60 Hz	50.0 LB (23 KG)
000508-024	-	Wall/Floor Mount Bracket for EQ2110PS Power Supply/Battery Charger	23.0 LB (10 KG)
006979-001	EQ2100PSM	Power Supply Monitor (required for use with EQ2110PS Power Supply/Battery Charger)	5.0 LB (2.3 KG)
000604-016	-	Battery Box, 36" H x 36" W x 12" D with shelf and vents	65.0 LB (30 KG)
000604-017	-	Battery Box with Power Supply Monitor and Power Distribution Terminals/Circuit Breakers	70.0 LB (32 KG)
000508-002	-	Battery 12V, 25 amp hour (2 req. per system)	23.0 LB (10 KG) ea.
000508-010	-	Battery 12V, 55 amp hour (2 req. per system)	56.0 LB (25 KG) ea.
000508-018	-	Battery 12V, 80 amp hour (2 req. per system)	79.0 LB (36 KG) ea.
000508-016	-	Battery 12V, 100 amp hour (2 req. per system)	95.0 LB (43 KG) ea.
		Field Power Supply Ground Fault Monitor (for use with customer provided power supply)	
006943-002	EQ2203IDCGF	Ground Fault Monitor, including aluminum J-box w/5 3/4" NPT entries, CSA/FM	5.0 LB (2.3 KG)
006943-003	EQ2207IDCGF	Ground Fault Monitor, including aluminum J-box w/5 M25/20 entries, CSA/FM	5.0 LB (2.3 KG)
006943-005	EQ2213IDCGF	Ground Fault Monitor, including stainless steel J-box w/5 3/4" NPT entries, CSA/FM	10.0 LB (4.5 KG)
006943-006	EQ2217IDCGF	Ground Fault Monitor, including stainless steel J-box w/5 M25/M20 entries, CSA/FM, CENELEC	10.0 LB (4.5 KG)

Replacement Parts

Part Number	OS Number	Description	Shipping Weight
		Logic Controller Replacement Parts	
006566-001	EQ2100LC	Logic Controller	5.0 LB (2.3 KG)
006570-001	EQ2100CG	Quantum Gateway	5.0 LB (2.3 KG)
006558-001	EQ2100IM	LON Isolator	5.0 LB (2.3 KG)
102844-001	74-200004-001	4 Pt. Relay Card	5.0 LB (2.3 KG)
		UV/IR Flame Detector Replacement Parts	
003240-202	DE1888B2	UV Sensor Module W/OI	8 OZ (0.23 KG)
005600-002	-	IR Sensor Module	8 OZ (0.23 KG)
002519-001	-	UV Ring, OI Reflection Polished	8 OZ (0.23 KG)
003525-001	-	IR Ring, OI Reflection Polished	8 OZ (0.23 KG)
SP006856-001	-	Electronic Board	2.0 LB (.9 KG)

C7052J/R7494 UV/IR Flame Detection System



C7052J



R7494

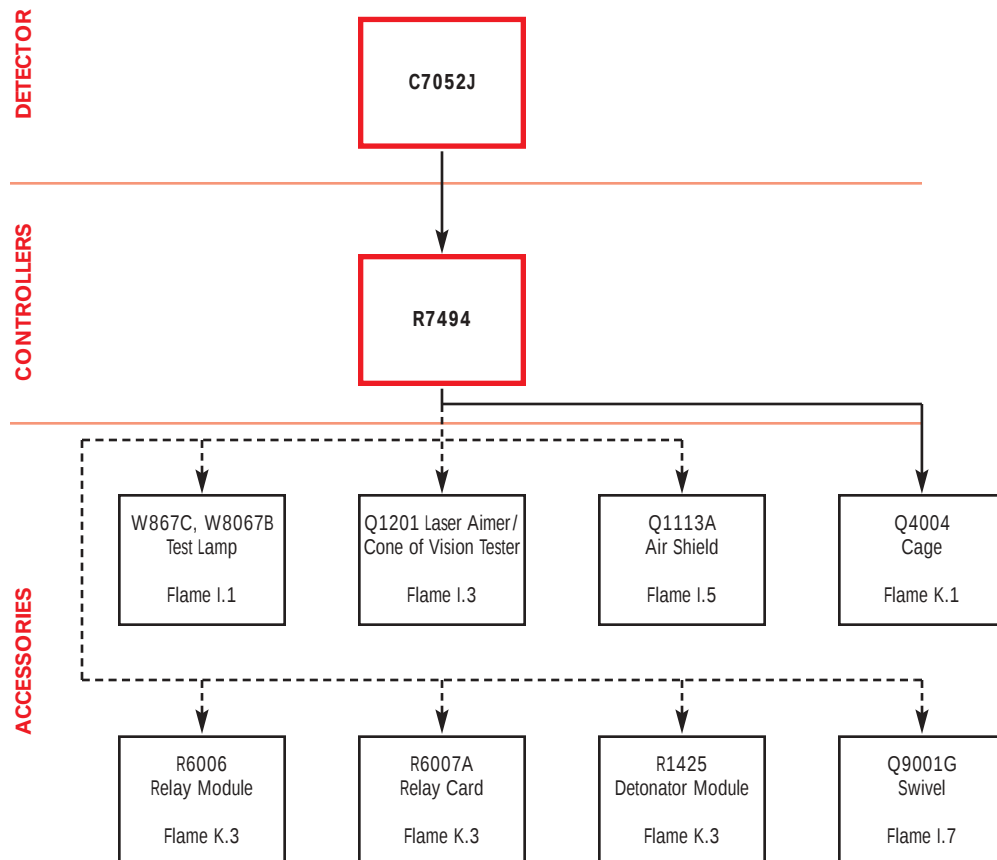
The **C7052J/R7494 UV/IR Flame Detection System** (Spec Sheet: 90-1033) is designed to provide continuous and automated fire protection in applications where the use of a sole UV or IR detector alone may cause unnecessary false alarms. The C7052J/R7494 system features double flame detection using both UV and single frequency IR sensing devices.

Mounted side-by-side, both sensors of the **C7052J** respond to hydrocarbon fires but have virtually no false alarm sources in common, making the system virtually immune to false calls. Only when simultaneous detection occurs will the detector trigger a fire signal.

The **R7494** controller continuously monitors up to eight UV/IR detectors and generates the fire alarm in response to the detector's fire signal. The front panel provides switches for selecting mode of operation and initiating test functions.

- Ignores false alarm sources such as arc welding, x-rays, gamma radiation and radiation from flickering hot objects
- Fast response - typically 1 to 5 seconds for an intense hydrocarbon fire
- Each detector independently registers an alarm
- Microprocessor control provides continuous diagnostics and automatic fault identification
- Automatic Optical Integrity (**oi**) for both UV and IR sensors
- Explosion-proof (flame-proof) detector housing
- Count test mode allows monitoring of actual detector output
- Voting circuitry for improved false alarm rejection
- Up to eight controllers can be wired to provide up to 64 voting detector zones
- CSA and Russian certified

NOTE: Check X3301 pulse retro fit options.



KEY: — = Required - - - - - = Option —●— = Choice Required

C7052J UV/IR Flame Detectors for Use with R7494 and R7495 Controllers

Part Number	OS Number	Encl Material	Conduit Entry	Tube Module	IR Module	FM	CSA	CEN	RUS	Ship Weight	Delivery
006968-003	C7052JA6D4A11S1W	Al	25 mm	DE1888A2	DE5400-001		X	X		4.8 lb (2.2 kg)	8 Weeks
006968-004	C7052JS6D4A11S1W	SS	25 mm	DE1888A2	DE5400-001		X	X		7.8 lb (3.5 kg)	16 Weeks
006968-006	C7052JA6D4Z1S1W*	Al	25 mm	No Tube*	DE5400-001		X	X		4.8 lb (2.2 kg)	8 Weeks
006968-020	C7052JA6D4A11S1R	Al	25 mm	DE1888A2	DE5400-001				X	4.8 lb (2.2 kg)	8 Weeks
006968-021	C7052JS6D4A11S1R	SS	25 mm	DE1888A2	DE5400-001				X	7.8 lb (3.5 kg)	16 Weeks

* For UV system upgrade, replaces 004430-XXX upgrade detector kits

R7494 Controller

Part Number	OS Number	Channels	Backplate Connector	FM	CSA	CSFM	RUS	Ship Weight	Delivery
003955-001	R7494B5001	8	X		X			4.4 lb (2.0 kg)	4 Weeks
003955-003	R7494B5012	8			X			4.4 lb (2.0 kg)	4 Weeks
003955-901	R7494B5001-R	8	X				X	4.4 lb (2.0 kg)	4 Weeks

C7052C/R7409 UV/IR Flame Detection



C7052C



R7409

The **C7052C/R7409 UV/IR Flame Detection** (Spec Sheet: 90-1034) is designed to provide continuous and automated fire protection in applications where the use of UV or IR detectors alone can result in unwanted (false) alarms. The system features the C7052C flame detector that uses both a UV and a single frequency IR sensing device mounted side-by-side on a junction box assembly. This system is unique because it provides outputs for fire (UV/IR) but also for individual UV only or IR only conditions.

For special applications only, consult factory.

- Controller continuously monitors up to four detectors
- STAR logic provides field adjustable sensitivity and response time settings
- Fast response – typically in 1 to 5 seconds for an intense hydrocarbon fire
- Front panel LEDs indicate fire response and general system status
- Continuous diagnostics and automatic fault identification
- Automatic **o**i for both UV and IR sensors
- Explosion-proof (flame-proof) detector housing
- CSA certified

DETECTOR

C7052C

CONTROLLER

R7409

ACCESSORIES

W867C, W8067B
Test Lamp
Flame I.1

Q1201 Laser Aimer/
Cone of Vision Tester
Flame I.3

Q1113A
Air Shield
Flame I.5

Q4004
Cage
Flame K.1

R6006
Relay Module
Flame K.3

R6007A
Relay Card
Flame K.3

R1425
Detonator Module
Flame K.3

Q9001G
Swivel
Flame I.7

KEY: — = Required - - - = Option —●— = Choice Required

Ultraviolet/Infrared Flame L.9

C7052C/R7409

C7052C UV/IR Flame Detectors for Use with R7409 Controllers

Part Number	OS Number	Encl Material	Conduit Entry	Tube Module	IR Module	FM	CSA	CEN	RUS	Ship Weight	Delivery
006968-009	C7052CA6D4A71S1W	AL	25 mm	DE1888A2	DE5600-001		X	X		4.8 lb (2.2 kg)	8 Weeks
006968-011	C7052CS6D4A71S1W	SS	25 mm	DE1888A2	DE5600-001		X	X		7.8 lb (3.5 kg)	16 Weeks

R7409C Controller

Part Number	OS Number	Channels	Backplate Connector	FM	CSA	Ship Weight	Delivery
003529-002	R7409C3001	4	X		X	4.4 lb (2.0 kg)	8 Weeks
003529-003	R7409C3012	4			X	4.4 lb (2.0 kg)	8 Weeks

C7052K UV/IR Flame Detector Upgrade Kit



C7052K

The **C7052K UV/IR Flame Detector Upgrade Kit** (Spec Sheet: 95-8320) is designed for upgrading existing UV detection systems that are suffering from false alarms caused by arc welding, x-rays, gamma rays, lightning, electrostatic discharges or other sources of UV interference in the environment. The C7052K detector combines a UV and a single frequency IR sensing device in one unit requiring simultaneous response from both UV and IR sensors before a fire alarm is generated.

When upgrading the R7302 or R7303, new boards are required. For upgrading of the R7404, a new EPROM may be required. Please check part number on the EPROM.

- Allows easy and economical upgrade of existing Det-Tronics UV systems to a false alarm resistant UV/IR system
- Insensitive to solar radiation, arc welding and x-rays
- Fast response-typically 1 to 5 seconds for an intense hydrocarbon fire
- Optical Integrity (**oi**) for UV sensors
- Explosion-proof (flame-proof) detector housing
- CSA and CENELEC certified

NOTE: Check X3301 pulse retro fit options.

DETECTOR

C7052K

CONTROLLERS

R7302

R7303

R7404

ACCESSORIES

W867C, W8067B
Test Lamp
Flame I.1

Q1201 Laser Aimer/
Cone of Vision Tester
Flame I.3

Q1113A
Air Shield
Flame I.5

Q4004
Cage
Flame K.1

R6006
Relay Module
Flame K.3

R6007A
Relay Card
Flame K.3

R1425
Detonator Module
Flame K.3

Q9001G
Swivel
Flame I.7

KEY: — = Required - - - - - = Option —●— = Choice Required

Ultraviolet/Infrared Flame L.11

C7052K

C7052K UV/IR Flame Detectors for Use with R7302, R7303, and R7404 Controllers

Part Number	OS Number	Encl Material	Conduit Entry	Tube Module	IR Module	FM	CSA	CEN	RUS	Ship Weight	Delivery
006968-014	C7052KA6D4A21S1W	AL	25 mm	DE1888A2	DE5500-003		X	X		7.8 lb (3.5 kg)	8 Weeks
006968-015	C7052KS6D4A21S1W	SS	25 mm	DE1888A2	DE5500-003		X	X		7.8 lb (3.5 kg)	16 Weeks
006968-018	C7052KA6D4Z21S1W*	AL	25 mm	No Tube*	DE5500-003		X	X		7.8 lb (3.5 kg)	8 Weeks
006968-019	C7052KS6D1Z21S1W*	SS	25 mm	No Tube*	DE5500-003		X	X		7.8 lb (3.5 kg)	16 Weeks

* For UV system upgrade, replaces 004395-XXX upgrade detector kits.

Replacement Parts for UV/IR Detectors

Part Number	OS Number	Size	Description	Use With	Required per Housing	Ship Weight	Delivery
004431-001	DE4431		Automatic oi and No. 3 board conversion kit	R7302, R7303	1	1 lb (0.45 kg)	4 Weeks
002519-001	N/A		oi ring for UV detectors	UV Detectors	1	.5 lb (0.23 kg)	8 Weeks
003525-001	N/A		oi ring for IR detectors	IR Detectors	1	.5 lb (0.23 kg)	8 Weeks
107427-006	N/A	Small	Viton O-ring for UV and IR sensor housings	-	2	.5 lb (0.23 kg)	8 Weeks
005197-002	N/A		J-box cover w/o sensor housings	U7652, cast C7052C5, J5, K5	1	1 lb (0.45 kg)	8 Weeks
005197-004	N/A		J-box cover, CENELEC	U7652, cast C7052C5, J5, K5	1	1 lb (0.45 kg)	8 Weeks
004432-001	DE4432-001		Circuit board for cast J-box	C7052J5000, C7052K5000	1	.5 lb (0.23 kg)	8 Weeks
SP005203-002	DE5203		Circuit board for cast J-box	U7652B	1	1 lb (0.45 kg)	8 Weeks
SP005203-003	DE5203		Circuit board for cast J-box	U7652C Auxiliary Relay	1	1 lb (0.45 kg)	8 Weeks
SP005203-004	DE5203		Circuit board for cast J-box	U7652C 4-20 ma output	1	1 lb (0.45 kg)	8 Weeks
003986-001	N/A		Terminal board	C7052C J-box	1	1 lb (0.45 kg)	8 Weeks

Upgrade Parts for Controllers when Converting to UV/IR Systems

Part Number	OS Number	STAR	Description	Ctrlr	Pin Chip	Replaces	Ship Weight	Delivery
004431-001	DE4431-001		Auto. oi and No. 3 Detector monitor bd*	R7302, 3	N/A	N/A	1 lb (0.45 kg)	8 Weeks
004101-001	DE2267-001		EPROM	R7404	24	002267-001	.5 lb (0.23 kg)	8 Weeks
004101-025	DE2267-025		EPROM	R7404	28	002267-025	.5 lb (0.23 kg)	8 Weeks
004101-012	DE2267-012	X	EPROM	R7404	24	002267-012	.5 lb (0.23 kg)	8 Weeks
004101-030	DE2267-030	X	EPROM	R7404	28	002267-030	.5 lb (0.23 kg)	8 Weeks
004101-024	DE2267-024	X	EPROM	R7404	28	002267-023	.5 lb (0.23 kg)	8 Weeks

* Plug in circuit boards required for each R7302 or R7303 conversion.

U7698E Unitized Single Frequency Infrared Flame Detector



U7698E

The **U7698E Unitized Single Frequency Infrared Flame Detector** (Spec Sheet: 90-1086) is ideally suited for harsh salt water environments, for areas where arc welding, x-rays, lightning, high concentrations of ultraviolet attenuating vapors occur, and in areas where oil film or dust particles can accumulate on the viewing window.

- Long detection range to hydrocarbon fires
- Field selectable automatic or manual **oi**
- Fire and fault relays standard
- Optional 4 - 20 mA output with separate oi fault indication
- Easily visible LEDs indicate normal operation, fire and fault conditions
- Adjustable sensitivity and time delay for fire output
- High-speed capability
- CENELEC approved for internal installation of addressable modules
- Selectable latching or non-latching for fire and fault outputs
- Selectable Time Domain Signal Analysis (TDSA) or Standard signal processing method
- Modular design with microprocessor based circuitry
- Ignores false alarm sources such as arc welding, lightning, chopped sunlight and x-rays
- Optional swivel mounting bracket for ease of installation and positioning
- Operates under adverse weather conditions and dirty environments
- Space provided for installation of addressable interface devices
- High temperature 125°C for 3 hour intervals (turbine applications)
- Time date stamping fire and fault event logging
- CSA, CENELEC and Russian certified

DETECTOR

U7698E

ACCESSORIES

W867C, W8067B
Test Lamp
Flame I.1

Q1201 Laser Aimer/
Cone of Vision Tester
Flame I.3

Q1113A/Q1115
Air Shield
Flame I.5

Q9001L
Swivel
Flame I.7

KEY:

———— = Required

----- = Option

●———— = Choice Required

Single Frequency Infrared Flame M.1

U7698E

U7698E IR Flame Detectors with Standard EXTERNAL Optical Integrity

Part Number	OS Number	Encl Material	Conduit Entry	High Temp*	Relay Output	4-20 mA Output	Data Logger	Electronic Module	CSA	CEN	RUS	Ship Weight	Delivery
006962-005	U7698EA2D1N1S1W	AL	25 mm		X			DE5994-003	X	X		4.75 lb (2.14 kg)	8 Weeks
006962-006	U7698EA2D2N1S1W	AL	25 mm		X	X		DE5994-004	X	X		4.75 lb (2.14 kg)	8 Weeks
006962-007	U7698ES2D1N1S1W	SS	25 mm		X			DE5994-003	X	X		10.0 lb (4.54 kg)	8 Weeks
006962-008	U7698ES2D2N1S1W	SS	25 mm		X	X		DE5994-004	X	X		10.0 lb (4.54 kg)	4 Weeks
006962-009	U7698EA2D1N1H1E	AL	25 mm	X	X			DE5994-003		X		4.75 lb (2.14 kg)	8 Weeks
006962-010	U7698ES2D1N1H1E	SS	25 mm	X	X			DE5994-003		X		10.0 lb (4.54 kg)	8 Weeks
006962-017	U7698EA2D2N1S1R	AL	25 mm		X	X		DE5994-004		X	X	4.75 lb (2.14 kg)	8 Weeks
006962-015	U7698EA2D1N1S1R	AL	25 mm		X			DE5994-003		X	X	4.75 lb (2.14 kg)	8 Weeks
006962-016	U7698ES2D1N1S1R	SS	25 mm		X			DE5994-003		X	X	10.0 lb (4.54 kg)	8 Weeks
006962-018	U7698ES2D2N1S1R	SS	25 mm		X	X		DE5994-004		X	X	10.0 lb (4.54 kg)	8 Weeks
006962-019	U7698EA2D1N1H1R	AL	25 mm	X	X			DE5994-003		X	X	4.75 lb (2.14 kg)	8 Weeks
006962-020	U7698ES2D1N1H1R	SS	25 mm	X	X			DE5994-003		X	X	10.0 lb (4.54 kg)	8 Weeks
006962-022	U7698EA2D7N1S1W	AL	25 mm		X		X	DE5994-006	X	X		4.75 lb (2.14 kg)	8 Weeks
006962-024	U7698ES2D7V1S1W	SS	25 mm		X		X	DE5994-006	X	X		10.0 lb (4.54 kg)	8 Weeks

All models listed are preset for TDSA, High Sensitivity

* 125 degree Celsius explosion-proof rating and intermittent operation for up to 3 hours maximum. Designed for turbine applications.

U7602E Unitized Ultraviolet Flame Detector



U7602E

U7602E Unitized Ultraviolet Flame Detector (Spec Sheet: 90-1112) combines the time proven Det-Tronics solar insensitive UV sensor with advanced arc rejection signal processing technology to provide the highest level of versatility and reliability in fire detection.

The detector has fire and fault relays as standard outputs, with a 4 - 20 mA output available as an option. The U7602E is equipped with both automatic and manual versions of the patented Det-Tronics **o_i** test feature.

- Latching/non-latching relays
- Sensitivity adjustments
- Time delay adjustments
- Standard or arc rejection signal processing
- High-speed capability (10 ms)
- 4 - 20 mA Output is isolated
- High temperature 125°C for 3 hour intervals (turbine applications)
- Optional patented Internal Reflection **o_i** provides improved reliability with less maintenance and downtime in environments where wet corrosive contaminants are present
- Time, date, fire and fault event logging
- CSA, CENELEC and Russian certified on installed addressable modules
- CE marked

DETECTORS

U7602E

ACCESSORIES

W867C, W8067B
Test Lamp
Flame I.1

Q1201 Laser Aimer/
Cone of Vision Tester
Flame I.3

Q1113A/Q1115
Air Shield
Flame I.5

Q9001L
Swivel
Flame I.7

KEY: — = Required - - - - - = Option —●— = Choice Required

U7602E

U7602E UV Flame Detectors with Standard EXTERNAL Optical Integrity

Part Number	OS Number	Encl Material	Conduit Entry	High Temp*	Relay Output	4-20 mA Output	Data Logger	Tube Module	CSA	CEN	RUS	Ship Weight	Delivery
006901-003	U7602EA2D71H1W	AL	25 mm	X	X		X	DE1888U2	X	X		4.75 lb (2.14 kg)	8 Weeks
006901-004	U7602ES2D71H1W	SS	25 mm	X	X		X	DE1888U2	X	X		10.0 lb (4.54 kg)	16 Weeks
006901-011	U7602EA2D2B1S1W	AL	25 mm		X	X		DE1888B2	X	X		4.75 lb (2.14 kg)	4 Weeks
006901-012	U7602ES2D2B1S1W	SS	25 mm		X	X		DE1888B2	X	X		10.0 lb (4.54 kg)	16 Weeks
006901-025	U7602EA2D1B1S1W	AL	25 mm		X			DE1888B2	X	X		4.75 lb (2.14 kg)	8 Weeks
006901-027	U7602ES2D1B1S1W	SS	25 mm		X			DE1888B2	X	X		10.0 lb (4.54 kg)	16 Weeks
006901-039	U7602EA2D7B1S1W	AL	25 mm		X		X	DE1888B2	X	X		4.75 lb (2.14 kg)	8 Weeks
006901-040	U7602ES2D7B1S1W	SS	25 mm		X		X	DE1888B2	X	X		10.0 lb (4.54 kg)	16 Weeks
006901-029	U7602EA2D1B1S1R	AL	25 mm		X			DE1888B2		X	X	4.75 lb (2.14 kg)	8 Weeks
006901-030	U7602ES2D1B1S1R	SS	25 mm		X			DE1888B2		X	X	10.0 lb (4.54 kg)	16 Weeks
006901-031	U7602EA2D2B1S1R	AL	25 mm		X	X		DE1888B2		X	X	4.75 lb (2.14 kg)	8 Weeks
006901-032	U7602ES2D2B1S1R	SS	25 mm		X	X		DE1888B2		X	X	10.0 lb (4.54 kg)	16 Weeks
006901-033	U7602EA2D1B1H1R	AL	25 mm	X	X			DE1888B2		X	X	4.75 lb (2.14 kg)	8 Weeks
006901-034	U7602ES2D1B1H1R	SS	25 mm	X	X			DE1888B2		X	X	10.0 lb (4.54 kg)	16 Weeks

Models listed are preset for ARC Rejection, High Sensitivity

*125 degree Celsius explosion proof rating and intermittent operation for up to 3 hours maximum. Designed for turbine applications.

U7602E High Speed UV Flame Detectors with Standard EXTERNAL Optical Integrity

Part Number	OS Number	Encl Material	Conduit Entry	High Temp	Relay Output	4-20 mA Output	Data Logger	Tube Module	CSA	CEN	RUS	Apollo Module	Ship Weight	Delivery
006901-036	U7602EA2D7U1S1W	AL	25 mm		X		X	DE1888U2	X	X			4.75 lb (2.14 kg)	8 Weeks

Models listed are preset for High Sensitivity

Time Delay not available

U7602E UV Flame Detectors with INTERNAL Optical Integrity

Part Number	OS Number	Encl Material	Conduit Entry	High Temp*	Relay Output	4-20 mA Output	Tube Module	CSA	CEN	RUS	Ship Weight	Delivery
006901-007	U7602EA2D1V1H1W	AL	25 mm	X	X		DE1888V3	X	X		4.75 lb (2.14 kg)	8 Weeks
006901-008	U7602ES2D1V1H1W	SS	25 mm	X	X		DE1888V3	X	X		10.0 lb (4.54 kg)	16 Weeks
006901-026	U7602EA2D1V1S1W	AL	25 mm		X		DE1888V3	X	X		4.75 lb (2.14 kg)	8 Weeks
006901-015	U7602EA2D2V1S1W	AL	25 mm		X	X	DE1888V3	X	X		4.75 lb (2.14 kg)	8 Weeks
006901-028	U7602ES2D1V1S1W	SS	25 mm		X		DE1888V3	X	X		10.0 lb (4.54 kg)	16 Weeks
006901-016	U7602ES2D2V1S1W	SS	25 mm		X	X	DE1888V3	X	X		10.0 lb (4.54 kg)	16 Weeks

Models listed are preset for ARC Rejection, High Sensitivity
*125 degree Celsius explosion proof rating and intermittent operation for up to 3 hours maximum. Designed for turbine applications.

U7602E

Eagle Quantum Ultraviolet Flame Detection System

Eagle Quantum Ultraviolet Flame Detection System (Spec Sheet: 90-1139) is a new off-the-shelf addressable system factory configured with pre-loaded software programming for easy installation. The system is based on innovative technology and is an alternative to traditional R7400 series controller-based UV systems. This new system offers additional features and options that are not available in controller bases systems. The System is offered in four configurations (all include a metal cabinet for housing the LCU and LIQU):

- Controller (LCU) for use with 1 to 24 UV detectors.
- Controller (LCU) and LIQU with 8 relay outputs for use with 1 to 8 UV detectors.
- Controller (LCU) and LIQU with 16 relay outputs for use with 9 to 16 UV detectors.
- Controller (LCU) and LIQU with 24 relay outputs for use with 17 to 24 UV detectors.

The basic Controller (LCU) configuration comes with a common Fire Alarm, Voting 2 of X and Fault output as well as common alarm contacts in groups of 4 or 8.

The optional LIQU furnishes individual Fire Alarm contacts for each detector.

UV detectors are available in Standard Temperature, Intermittent Duty High Temperature and Continuous Duty High Temperature.

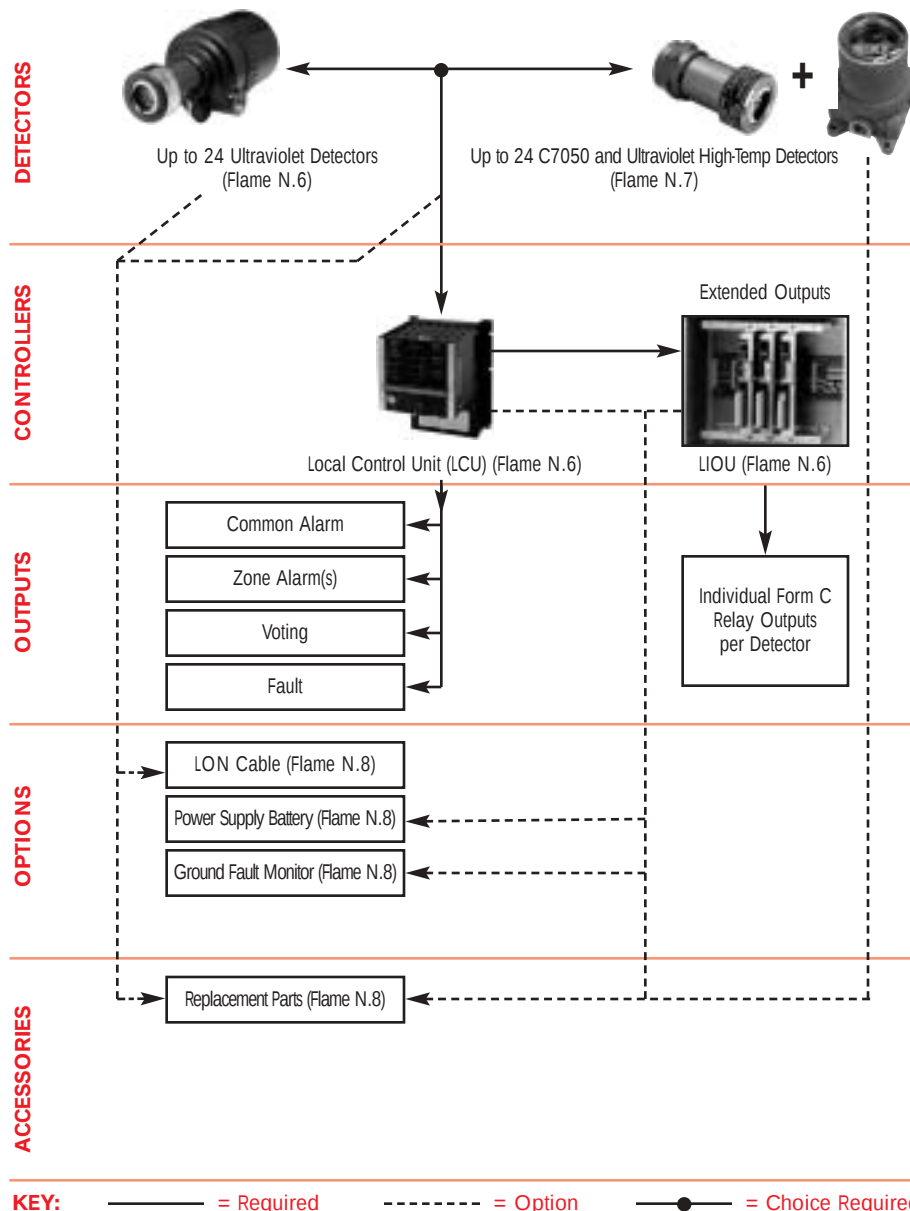
Additional features include: Fault tolerant communications loop, device memory for alarm logging, built-in diagnostics and RS232 serial output with Modbus protocol. Complies with EU CE mark and NFPA-72 when used with optional battery supply/monitor/batteries.

Optional Power Supplies/Battery Charger, Batteries and Battery cabinet; and Power Supply/Ground fault monitors available (See options)

- Contains LCU and optional LIQU
- Terminal strip for Power distribution and LCU outputs.
- Seamless Red Painted Steel
- Wall mountable
- 24in X 24in X 12in D.
- Key lockable door latch
- Hinged/lockable window for access to reset and silence functions



NEMA 4 / IP-55 Enclosure



Eagle Quantum Ultraviolet Flame Detection System



Eagle Quantum System Cabinets and Equipment

Part Number	OS Number	Description	Shipping Weight
000830-001	-	Eagle Quantum System Cabinet with LCU	45.0 LB (21 KG)
000830-002	-	Eagle Quantum System Cabinet with LCU, LIOU and 2 Relay Cards (8 outputs)	60.0 LB (28 KG)
000830-003	-	Eagle Quantum System Cabinet with LCU, LIOU and 4 Relay Cards (16 outputs)	70.0 LB (32 KG)
000830-004	-	Eagle Quantum System Cabinet with LCU, LIOU and 6 Relay Cards (24 outputs)	80.0 LB (36 KG)



Eagle Quantum Standard UV Detectors

Part Number	OS Number	Description	Shipping Weight
006600-002	EQ2204UV	Quantum UV Detector, AL, M25, CE, CSA, CENELEC	5.0 LB (2.3 KG)
006600-004	EQ2214UV	Quantum UV Detector, SS, M25, CE, CSA, CENELEC	10.0 LB (4.5 KG)
004404-005	Q9001L2002	Swivel, SS	1.5 LB (0.7 KG)



Eagle Quantum Intermittent Duty Hi Temp UV Detectors

Part Number	OS Number	Description	Shipping Weight
006600-006	EQ2234UV	Quantum UV Detector, AL, M25, CE, CSA, CENELEC, Intermittent Duty High Temp *	5.0 LB (2.3 KG)
006600-008	EQ2244UV	Quantum UV Detector, SS, M25, CE, CSA, CENELEC, Intermittent Duty Hi Temp *	10.0 LB (4.5 KG)
004404-005	Q9001L2002	Swivel, SS	1.5 LB (0.7 KG)

NOTE: * Intermittent Duty Hi Temp UV Detectors are designed for 3 hour maximum operation at elevated temperatures

Eagle Quantum Continuous Duty Hi Temp UV Detectors

Part Number	OS Number	Description	Shipping Weight
UVHT High Temp Detector - UV Detector			
006899-039	C7050BA6F4E1H1W	Quantum UVHT - UV Detector, AL, 20MM, CE, CSA, CENELEC, Continuous Duty Hi Temp *	1.2 LB (0.6 KG)
006899-040	C7050BS6F4E1H1W	Quantum UVHT - UV Detector, SS, 20MM, CE, CSA, CENELEC, Continuous Duty Hi Temp *	2.2 LB (1.0 KG)
002099-003	Q9001B1175	Swivel, AL	1.1 LB (0.5 KG)
004404-002	Q9001H8001	Swivel, SS	1.5 LB (0.7 KG)
UVHT High Temp Detector - Electronic Module			
007082-002	EQ2207UVHT	Quantum UVHT Electronic Module, AL, 25/20MM, 5 Port, CE, CSA, CENELEC **	4.0 LB (1.8 KG)
007082-004	EQ2217UVHT	Quantum UVHT Electronic Module, SS, 25/20MM, 5 Port, CE, CSA, CENELEC **	9.5 LB (4.3 KG)

Notes: * Continuous Duty Hi Temp UV Detectors are designed for continuous duty at 257° F (125° C)
** One (1) Electronic Module is required for use with each UVHT Detector

Options

Part Number	OS Number	Description	Shipping Weight
		Suggested LON Cable (verify with project specification for suitability)	
000147-127	-	EQ LON Cable, Shielded 16 AWG, 600 volt, Belden 8719	.25 LB/FT (.11 KG)
		Power Supply/Battery Charger and Accessories	
000604-013	EQ2110PS	Power Supply/Battery Charger, 10 Amp, 120 Vac input, 60 Hz	50.0 LB (23 KG)
000508-024	-	Wall/Floor Mount Bracket for EQ2110PS Power Supply/Battery Charger	23.0 LB (10 KG)
006979-001	EQ2100PSM	Power Supply Monitor (required for use with EQ2110PS Power Supply/Battery Charger)	5.0 LB (2.3 KG)
000604-016	-	Battery Box, 36" H x 36" W x 12" D with shelf and vents	65.0 LB (30 KG)
000604-017	-	Battery Box with Power Supply Monitor and Power Distribution Terminals/Circuit Breakers	70.0 LB (32 KG)
000508-002	-	Battery 12V, 25 amp hour (2 req. per system)	23.0 LB (10 KG) ea.
000508-010	-	Battery 12V, 55 amp hour (2 req. per system)	56.0 LB (25 KG) ea.
000508-018	-	Battery 12V, 80 amp hour (2 req. per system)	79.0 LB (36 KG) ea.
000508-016	-	Battery 12V, 100 amp hour (2 req. per system)	95.0 LB (43 KG) ea.
		Field Power Supply Ground Fault Monitor (for use with customer provided power supply)	
006943-002	EQ2203IDCGF	Ground Fault Monitor, including aluminum J-box w/5 3/4" NPT entries, CSA/FM	5.0 LB (2.3 KG)
006943-003	EQ2207IDCGF	Ground Fault Monitor, including aluminum J-box w/5 M25/20 entries, CSA/FM	5.0 LB (2.3 KG)
006943-005	EQ2213IDCGF	Ground Fault Monitor, including stainless steel J-box w/5 3/4" NPT entries, CSA/FM	10.0 LB (4.5 KG)
006943-006	EQ2217IDCGF	Ground Fault Monitor, including stainless steel J-box w/5 M25/M20 entries, CSA/FM, CENELEC	10.0 LB (4.5 KG)

Replacement Parts

Part Number	OS Number	Description	Shipping Weight
		Logic Controller Replacement Parts	
006566-001	EQ2100LC	Logic Controller	5.0 LB (2.3 KG)
006570-001	EQ2100CG	Quantum Gateway	5.0 LB (2.3 KG)
006558-001	EQ2100IM	LON Isolator	5.0 LB (2.3 KG)
102844-001	74-200004-001	4 Pt. Relay Card	5.0 LB (2.3 KG)
		UV Flame Detector Replacement Parts	
006598-001	-	Electronic Module Assembly	8 OZ (0.23 KG)
003240-202	DE1888B2	UV Sensor Module W/OI	8 OZ (0.23 KG)
002519-001	-	UV Ring, OI Reflector, Polished	8 OZ (0.23 KG)
		UVHT Hi Temp Flame Detector Replacement Parts	
006598-002	-	Electronic Module Assembly	8 OZ (0.23 KG)
003240-221	DE1888K3	UV Sensor Module W/OI	8 OZ (0.23 KG)
002519-001	-	UV Ring, OI Reflection Polished	8 OZ (0.23 KG)

C7050 Detector



C7050

C7050 Detector (Manual: 95-8214) provides fast, reliable flame detection in a wide variety of applications. The detector has the Automatic Optical Integrity (**oi**) feature, providing a continuous check of detector optical surfaces, detector sensitivity, and electronic circuitry of the detector/controller system. Not recommended for applications where welding or lightening may be present.

- Replaceable tube module
- External Automatic Optical Integrity (**oi**)
- Internal Automatic Optical Integrity (**oi**)
- Standard temperature option
- High temperature option, 125°C continuous duty
- Variable sensitivities available to match hazard
- CSA, CENELEC and Russian certified

NOTE: Check X3301 pulse retro fit options.

DETECTORS

C7050

CONTROLLERS

R7404
Standard
Flame N.11

R7404
(STAR)
Flame N.11

ACCESSORIES

W8066
Test Lamp
Flame I.1

Q1201 Laser Aimer/
Cone of Vision Tester
Flame I.3

Q1113A/Q1115
Air Shield
Flame I.5

Q4004
Cage
Flame K.1

R6006
Relay Module
Flame K.3

R6007A
Relay Card
Flame K.3

R1425
Detonator Module
Flame K.3

Q9001B
Swivel
Flame I.7

KEY: — = Required - - - - - = Option —●— = Choice Required

C7050

Ultraviolet Flame N.9

C7050B Ultraviolet Flame Detectors with Standard EXTERNAL Optical Integrity

Part Number	OS Number	Encl Material	Conduit Entry	High Temp*	Tube Module	CSA	CEN	RUS	Ship Weight	Delivery
006899-004	C7050BS6F4A1S1W	SS	20 mm		DE1888A2	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-003	C7050BA6F4A1S1W	AL	20 mm		DE1888A2	X	X		1.2 lb (0.6 kg)	4 Weeks
006899-006	C7050BS6E4K1H1W	SS	1/2 in	X	DE1888K2	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-008	C7050BS6F4K1H1W	SS	20 mm	X	DE1888K2	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-005	C7050BA6E4K1H1W	AL	1/2 in	X	DE1888K2	X	X		1.2 lb (0.6 kg)	8 Weeks
006899-007	C7050BA6F4K1H1W	AL	20 mm	X	DE1888K2	X	X		1.2 lb (0.6 kg)	8 Weeks
006899-012	C7050BS6F4M1S1W	SS	20 mm		DE1888M2	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-011	C7050BA6F4M1S1W	AL	20 mm		DE1888M2	X	X		1.2 lb (0.6 kg)	8 Weeks
006899-032	C7050BS6F4X1S1W	SS	20 mm		DE1888N	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-031	C7050BA6F4X1S1W	AL	20 mm		DE1888N	X	X		1.2 lb (0.6 kg)	8 Weeks
006899-016	C7050BS6F4N1S1W	SS	20 mm		DE1888N2	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-015	C7050BA6F4N1S1W	AL	20 mm		DE1888N2	X	X		1.2 lb (0.6 kg)	8 Weeks
006899-020	C7050BS6F4T1S1W	SS	20 mm		DE1888T2	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-019	C7050BA6F4T1S1W	AL	20 mm		DE1888T2	X	X		1.2 lb (0.6 kg)	8 Weeks
006899-033	C7050BA6F4A1S1R	AL	20 mm		DE1888A2			X	1.2 lb (0.6 kg)	4 Weeks
006899-034	C7050BS6F4A1S1R	SS	20 mm		DE1888A2			X	2.2 lb (1.0 kg)	8 Weeks
006899-035	C7050BA6F4K1H1R	AL	20 mm	X	DE1888K2			X	1.2 lb (0.6 kg)	8 Weeks
006899-036	C7050BS6F4K1H1R	SS	20 mm	X	DE1888K2			X	2.2 lb (1.0 kg)	8 Weeks

*High temperature rating - continuous duty at 125 degree Celsius, for environments which normally exceed 75 degree Celsius operation.

C7050B Ultraviolet Flame Detectors with INTERNAL Optical Integrity

Part Number	OS Number	Encl Material	Conduit Entry	High Temp	Tube Module	CSA	CEN	RUS	Ship Weight	Delivery
006899-024	C7050BS6F4V1S1W	SS	20 mm		DE1888V2	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-023	C7050BA6F4V1S1W	AL	20 mm		DE1888V2	X	X		1.2 lb (0.6 kg)	8 Weeks
006899-028	C7050BS6F4W1S1W	SS	20 mm		DE1888W2	X	X		2.2 lb (1.0 kg)	8 Weeks
006899-027	C7050BA6F4W1S1W	AL	20 mm		DE1888W2	X	X		1.2 lb (0.6 kg)	8 Weeks

R7404 Controller



R7404 Standard



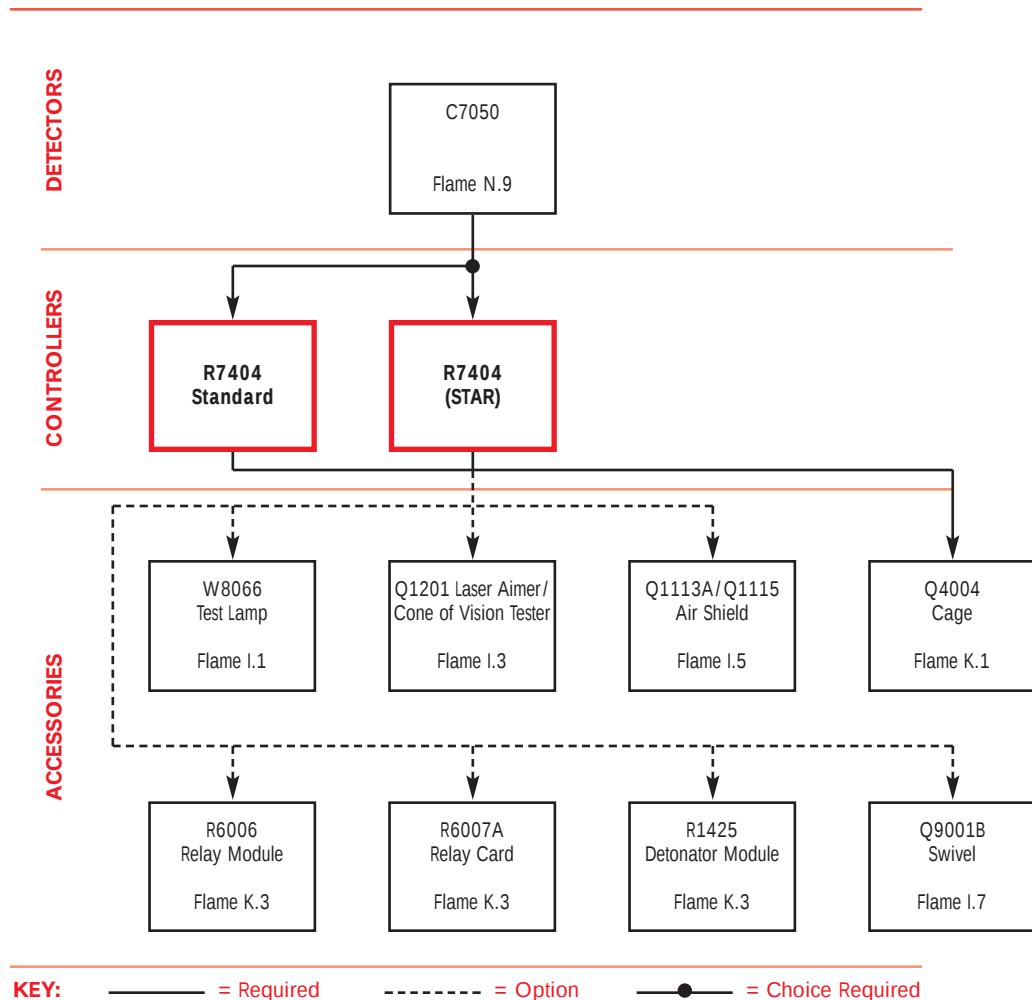
R7404 STAR

The C7050 Detector and **R7404 Controller** (Spec Sheet: 90-1014) provide fast, reliable flame detection in a wide variety of applications. The microprocessor based controller simultaneously monitors up to 16 C7050 ultraviolet detectors in up to eight different zones. The detector has the Automatic Optical Integrity (**oi**) feature, providing a continuous check of detector optical surfaces, detector sensitivity, and electronic circuitry of the detector/controller system. Selectable time delay. (Indoor applications.)

The **STAR (Selectable Transient Arc Rejection)** (Manual: 95-8294) logic program for the **R7404 Controller** has been specifically designed to reject transient electric arcs, such as those produced in electrostatic powder coating or paint spraying booths emitting UV radiation which can cause false actuation of a UV flame detection system. Supports up to eight C7050 in up to eight different zones detectors using adjustable transient arc rejection parameters. (Outdoor applications.)

- Automatic Optical Integrity (**oi**)
- Adjustable sensitivity and time delay
- Automatic fault identification
- Individual zone identification with eight voting options
- Latching ZONE LEDs identify the zone responding to fire
- Selectable latching or non-latching output circuits
- Individual detector output (count rate) can be measured and observed on digital display
- CSA and Russian certified

NOTE: Check X3301 pulse retro fit options.



R7404

Ultraviolet Flame N.11

R7404 Controller

R7404 UV Fire Detection Controller

Part Number	OS Number	Channels	Backplate Connector	STAR Logic	High Speed	CSA	CSFM	RUS	Ship Weight	Delivery
002257-001	R7404B7001	8	X			X	X		4.4 lb (2.0 kg)	4 Weeks
002257-006	R7404B7003*	8	X	X		X	X		4.4 lb (2.0 kg)	4 Weeks
002257-007	R7404B7004	8				X	X		4.4 lb (2.0 kg)	4 Weeks
002257-005	R7404C5020	8	X		X	X	X		4.4 lb (2.0 kg)	8 Weeks
002257-901	R7404B7001-R	8	X					X	4.4 lb (2.0 kg)	4 Weeks
002257-906	R7404B7003-R*	8	X	X				X	4.4 lb (2.0 kg)	8 Weeks

*Star logic controllers are recommended for outdoor applications.

R7404 Remote Surveillance Fire Detection System

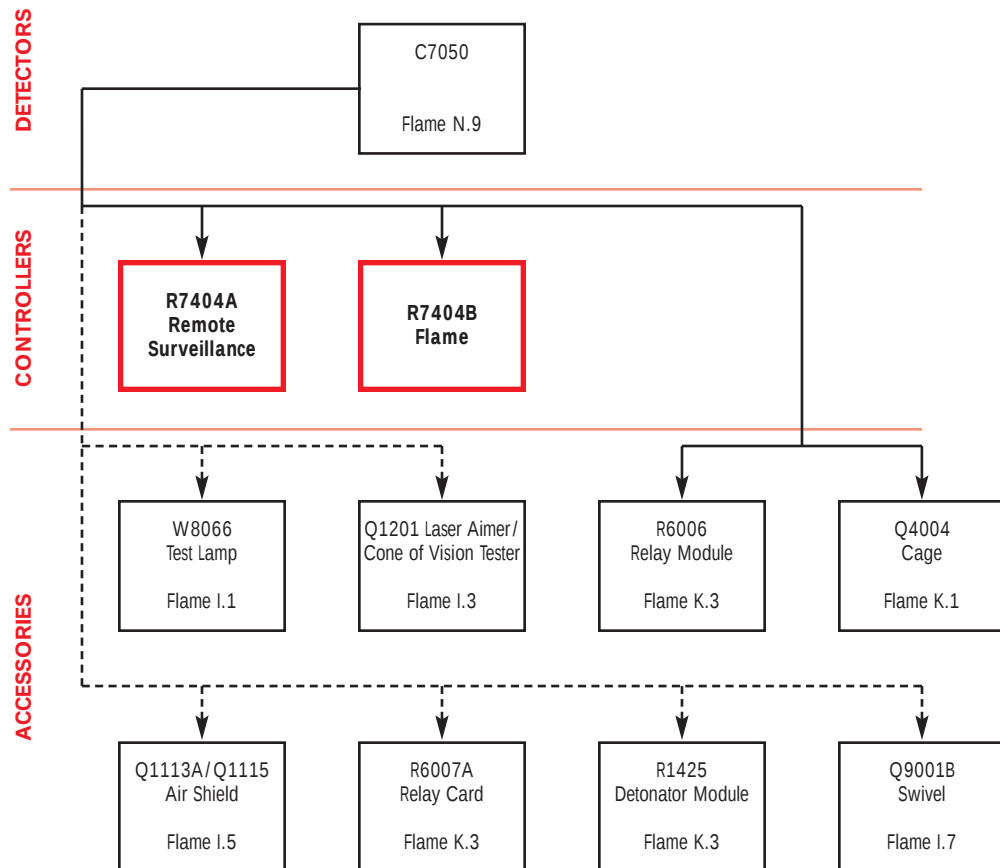


R7404

The **R7404 Remote Surveillance Fire Detection System** (Manual: 95-8249) is designed for applications where UV radiation is present outside an area that is to be protected that can cause unwanted alarms.

Surveillance detectors are positioned to detect UV radiation occurring outside the protected area. Fire detectors monitor the area requiring protection. A percentage of the signal from the surveillance detectors is subtracted from the signals of the fire detectors to prevent unwanted alarms.

- Automatically compensates for extraneous, remote UV radiation
- Automatic Optical Integrity (oi)
- Manual oi test capability
- Automatic fault identification
- Individual zone identification with voting options
- Microprocessor controlled
- Both fire and fault outputs have redundant indication, i.e. digital readout and separate LED
- Indicating ZONE OUTPUT LEDs are pulsed during actual response to fire and are latching
- Output circuits can be made latching or non-latching through field adjustment
- CSA certified
- Requires factory consultation



R7404

R7404 Remote Surveillance Fire Detection System

C7050B UV Flame Detectors with Standard EXTERNAL oi for Remote Surveillance

Part Number	OS Number	Encl Material	Conduit Entry	High Temp	Tube Module	CSA	CEN	Ship Weight	Delivery
006899-012	C7050BS6F4M1S1W	SS	20 mm		DE1888M2	X	X	2.2 lb (1.0 kg)	8 weeks
006899-011	C7050BA6F4M1S1W	AL	20 mm		DE1888M2	X	X	1.2 lb (0.6 kg)	8 weeks

Remote Surveillance UV Controllers

Part Number	OS Number	Channels	Connector	STAR Logic	Remote Surv	CSA	RUS	Ship Weight	Delivery
002257-002	R7404A8012	8	X		X	X		4.4 lb (2.0 kg)	16 Weeks
002257-003	R7404B7082	8	X	X		X		4.4 lb (2.0 kg)	16 Weeks

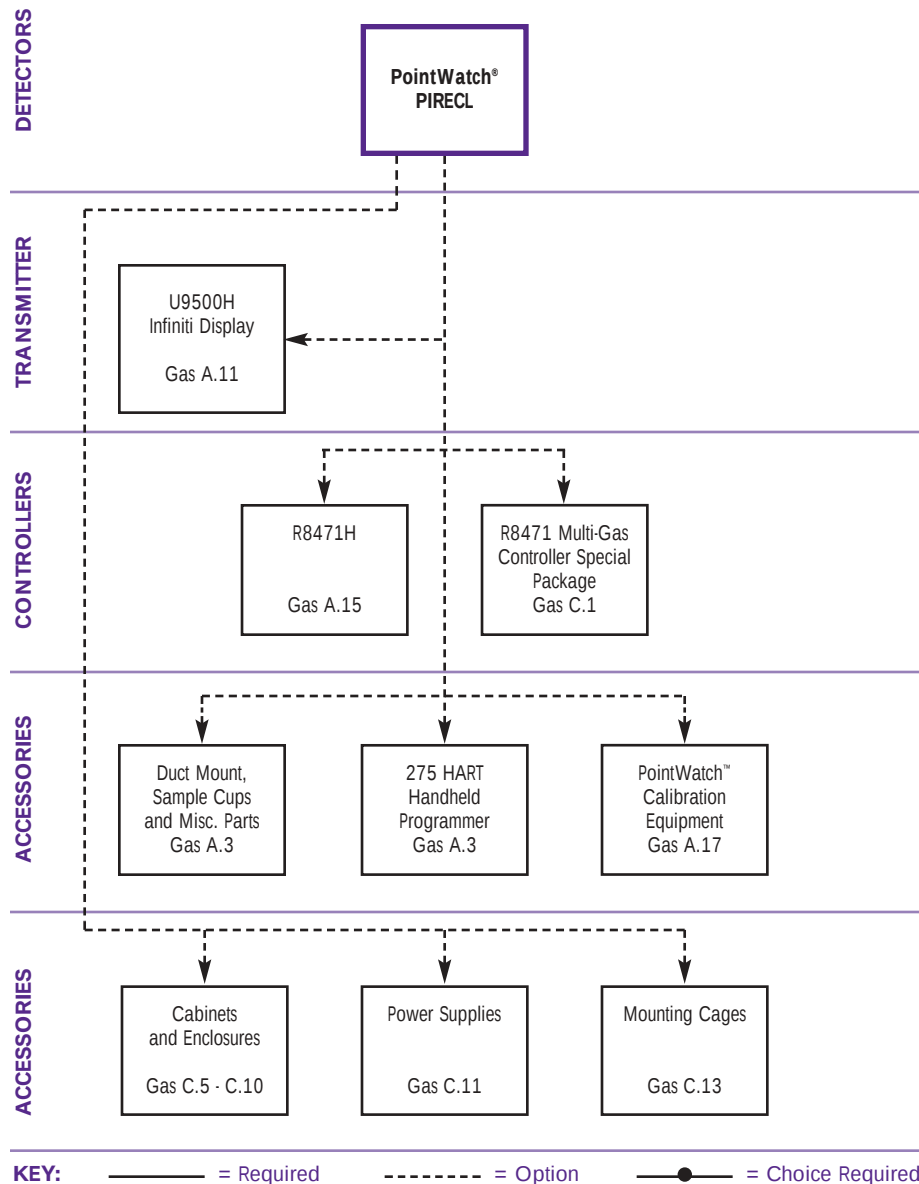
PointWatch® Eclipse PIRECL Hydrocarbon Detector



PointWatch® Eclipse PIRECL

The new **PointWatch® Eclipse PIRECL Hydrocarbon Detector** (Spec Sheet: 90-1138) is a stainless steel, point infrared gas detector providing detection of flammable hydrocarbon gases in the lower explosive limit (LEL) range. Standard signal outputs include isolated 4 to 20 milliampere output, HART communication protocol, and RS-485 serial communication supporting Modbus. A tri-color LED provides visual display of operating status. New weather protection baffle design offers exceptional protection along with easy twist-lock removal and installation. ATEX 94/9/EC certified for global certification compliance. Additional features include:

- Internal wiring compartment saves money and time
- Heated optics
- Non-intrusive calibration
- Hand-held comm capability
- Optional 2-alarm, 1-fault relay package
- EExd, e, ib protection designs
- Versions available with FM/CSA and CENELEC/CE certifications
- Eagle Premier System-compatible version upcoming
- Compatible with U9500H/R8471H transmitter/controller family
- Remote calibration capability using model PIRTB junction box



PointWatch® Eclipse PIRECL Hydrocarbon Detector

Pointwatch Eclipse

MODEL	DESCRIPTION
PIRECL	Point Infrared Eclipse Gas Detector
TYPE	THREAD TYPE
A	3/4" NPT
B	M25
TYPE	OUTPUT & MEASUREMENT OPTIONS
1	4-20 mA with HART protocol & RS-485: 0-100%LEL Full Scale Range
4	Eagle Premier Compatible Only: 0-100%LEL Full Scale Range
TYPE	RELAY OUTPUT OPTION
A	No Alarm & Fault Relay Option Board installed
B	Alarm & Fault Relay Option Board installed (Not compatible with Eagle Premier)
TYPE	WEATHER PROTECTION
1	Standard External Black Plastic Weather Baffle with Hydrophobic filter
2	Standard External Black Plastic Weather Baffle withOUT Hydrophobic filter
5	No Weather Protection installed
TYPE	APPROVALS
A	Americas (FM, CSA)
E	European (CENELEC, ATEX, CE)
S	SAA
R	Russian

Available Pointwatch Eclipse models

Model Number	Part number	Ship Weight	Delivery
PIRECLA1A1A	007168-001	7.5 lb (3.4 kg)	8 weeks
PIRECLB1A1E	007168-002	7.5 lb (3.4 kg)	8 weeks
PIRECLA1A2A	007168-003	7.5 lb (3.4 kg)	8 weeks
PIRECLB1A2E	007168-004	7.5 lb (3.4 kg)	8 weeks
PIRECLA1B1A	007168-005	7.5 lb (3.4 kg)	8 weeks
PIRECLA1B2A	007168-007	7.5 lb (3.4 kg)	8 weeks

PointWatch® Eclipse PIRECL Duct Mounting and Accessories



Direct Duct Mount Assembly

The **Direct Duct Mount Assembly** (p/n 007525-XXX series) enables the model PIRECL Pointwatch Eclipse sensing chamber to be installed directly within air handling ductwork. The assembly is mounted on the duct wall, with the PIRECL sensing chamber exposed directly to duct airflow, ensuring fast response to flammable hydrocarbon gases and vapors. A built-in calibration gas nozzle with an external, self-sealing fitting enables testing and calibration without removal of the detector from the duct. Not recommended for applications where duct air temperatures can exceed +167°F (+75°C). Price includes all necessary hardware for proper operation, but does not include PIRECL Pointwatch Eclipse.



Model Q900D Duct Mount Kit

The **Model Q900 Duct Mount Kit** is used with the PIRECL PointWatch Eclipse to detect combustible hydrocarbon gases within air handling ductwork. The Q900 is mounted to the exterior of the duct wall and utilizes an duct inlet / return tube arrangement that provides cross-duct air sampling without the need for vacuum pumps or aspirators. High temperature rated, flexible teflon tubes are provided to enable easy access to optics for inspection purposes. Price includes all necessary hardware for proper operation, but does not include PIRECL Pointwatch Eclipse. One duct air inlet tube and one return tube are furnished with each Q900 kit.



**Handheld HART Communicator
Model 275**

The **Model 275 HART Communicator** is available from Detector Electronics Corporation under agreement with Fisher-Rosemount Systems, Inc. The HART Communicator enables connection to the PIRECL via the onboard HART port connection.

The **Remote HART Port Kit** is used with the Model PIRECL PointWatch Eclipse IR gas detector to provide access to the Eclipse's onboard, intrinsically-safe HART port for a distance up to 20 meters. Cable set is 20 meter long, 2-core, shielded 20 awg conductors with overall PVC-jacket, and is IEC332 approved.

In addition to standard replacement **weather baffles**, special replacement weather baffles for PIRECL Eclipse are now available: a version with a 1/16 inch NPT, internally-threaded calibration gas opening, enabling users to install a threaded compression fitting (not supplied) into the baffle for use with plastic or metal tubing. Also available is a replacement weather baffle with an external, 7/16-20 threaded calibration gas opening, used within the PIRECL sample draw cup assembly p/n 007378-001. These special weather baffles are identical in all other respects to the standard, factory-installed weather baffles provided on all standard PIRECL models.

The **Sample Draw Cup assembly** p/n 007378-001 enables the Model PIRECL PointWatch Eclipse to function within a gas sampling system. It consists of an outer cup assembly with stainless-steel, inlet/outlet compression fittings, a special inner baffle assembly with external-threaded extension, and silicon gaskets to ensure proper cup assembly seal is provided.

PIRECL Duct-Mount Kits

Part Number	OS number	Description	Ship Weight	Delivery
007525-003	n/a	Direct-Duct Mount Kit for PIRECL, 316 stainless steel (PIRECL not included)	1 lb	4 weeks
007525-004	n/a	Direct-Duct Mount Kit for PIRECL, aluminum (PIRECL not included)	1 lb	4 weeks
007529-001	n/a	Direct-Duct Mount Kit Assy (316sstl) w/factory-fit PIRECLA1A1A	10 lb (5 kg)	8 weeks
007529-002	na/	Direct-Duct Mount Kit Assy (316sstl) w/factory-fit PIRECLA1A1E	10 lb (5 kg)	8 weeks
007355-001	Q900A1001	Q900 Duct Mount Assembly, 304 stainless steel (PIRECL not included)	1 lb	4 weeks

275 HART Communicator for use w/ PIRECL

Part Number	OS number	Description	Ship Weight	Delivery
103346-001	n/a	275 HART communicator, English Language, CENELEC approved		4 weeks
103346-002	n/a	275 HART communicator, English Language, FMRC approved		4 weeks
103346-003	n/a	275 HART communicator, English Language, CSA approved		4 weeks
103346-004	n/a	275 HART communicator, French Language, CSA approved		4 weeks
103346-005	n/a	275 HART communicator, German Language, CENELEC approved		4 weeks
103346-006	n/a	275 HART communicator, French Language, CENELEC approved		4 weeks

Remote HART Port Replicator Kit for use w/ PIRECL

Part Number	OS number	Description	Ship Weight	Delivery
000118-010	n/a	Remote HART port replicator Kit, includes 20 meter prefab cable set	3 lbs (1.4 kg)	4 weeks
Spare Parts for HART Port Replicator Kit				
000118-011	n/a	Cordset, 20 meters intrinsically safe cable with prefab connectors	1 lb (0.5 kg)	4 weeks
000118-012	n/a	Stainless steel adapter for PIRECL HART connector	1 lb (0.5 kg)	4 weeks
000118-013	n/a	HART port connector box, IP67 rated, w/stainless connectors	1 lb (0.5 kg)	4 weeks

PIRECL Weather Baffles

Part Number	OS number	Description	Ship Weight	Delivery
007165-001	n/a	Weatherbaffle with std inlet nozzle, w/o hydrophobic filter	1 lb	4 weeks
007165-002	n/a	Weatherbaffle with std inlet nozzle, w/hydrophobic filter	1 lb	4 weeks
007165-003	n/a	Weatherbaffle with 1/8" NPT cal gas inlet, w/o hydrophobic filter	1 lb	4 weeks
007165-004	n/a	Weatherbaffle with 1/8" NPT cal gas inlet, w/ hydrophobic filter	1 lb	4 weeks
007165-005	n/a	Weatherbaffle w/7/16" ext threads (for use w/sample draw cup 007378-001)	8 oz (0.23 kg)	4 weeks

PIRECL Sample Draw Cup

Part Number	OS number	Description	Ship Weight	Delivery
007378-001	n/a	Sample draw cup assembly for PIRECL	1 lb	4 weeks

PIRECL Miscellaneous Parts

Part Number	Description	Ship Weight	Delivery
006672-002	PIRECL windshield calibration bag	8 oz (0.23 kg)	4 weeks
103035-001	std inlet nozzle calgas cap, black	8 oz (0.23 kg)	4 weeks
107427-040	o-ring, 3.75" i.d., j-box cover	8 oz (0.23 kg)	4 weeks
107427-052	o-ring, 3.25" i.d., front flange (internal)	8 oz (0.23 kg)	4 weeks
107427-053	o-ring, 2.43 i.d., weathershield	8 oz (0.23 kg)	4 weeks

PointWatch® PIR9400 Infrared Hydrocarbon Detector

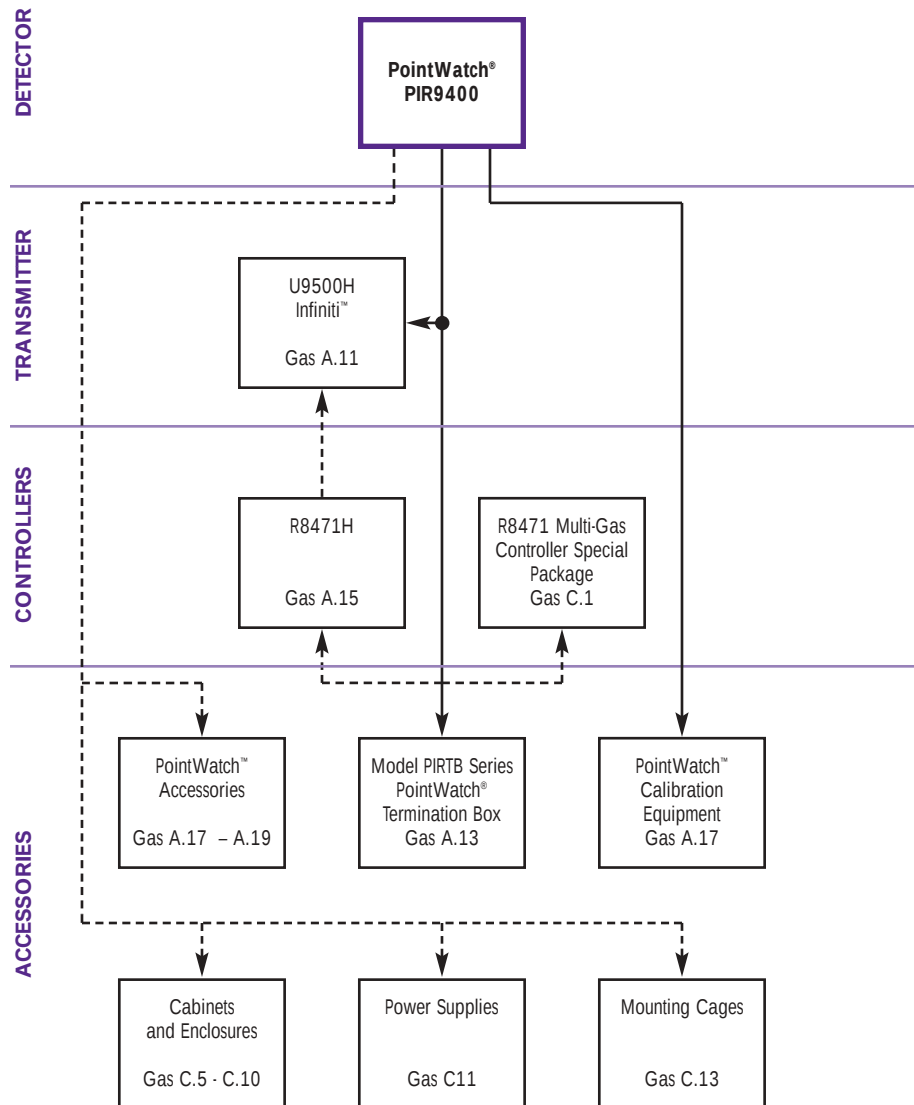


PointWatch® PIR9400

PointWatch® PIR9400 Infrared Hydrocarbon Detector (Spec Sheet: 90-1074). For the detection of combustible hydrocarbon gases. Provides reliable operation in high concentrations of background hydrocarbon gases and has low maintenance costs. It is immune to poisoning. Five year warranty.

- 4-20 mA output
- Automatic fault and fouled optics indications
- Heated optics
- 0 to 100% LFL detection range
- Non-intrusive calibration capability
- Stainless steel or aluminum option
- Aluminum or plastic baffle option
- Stand-alone or use with Infiniti® option
- Duct mount and sample draw options

PointWatch PIR9400



KEY: — = Required - - - = Option —●— = Choice Required

Combustible Gas A.5

PointWatch® PIR9400 Infrared Hydrocarbon Detector

PointWatch PIR9400

PointWatch® PIR9400 IR Detectors

Part Number	OS Number	Conduit Entry	Encl Material	Baffle Type	FM	CSA	CEN	Other	Ship Weight	Delivery
006300-001	PIR9400A3LA0	3/4 in	AL	AL	X	X	X		2.0 lb (0.95 kg)	8 weeks
006300-002	PIR9400A2LA0	20mm	AL	AL	X	X	X		2.0 lb (0.95 kg)	8 weeks
006300-003	PIR9400S3LP0	3/4 in	SS	Plastic	X	X	X		4.0 lb (1.8 kg)	8 weeks
006300-004	PIR9400S2LP0	20 mm	SS	Plastic	X	X	X		4.0 lb (1.8 kg)	8 weeks
006300-005	PIR9400A3LP0	3/4 in	AL	Plastic	X	X	X		2.0 lb (0.95 kg)	8 weeks
006300-006	PIR9400A2LP0	20mm	AL	Plastic	X	X	X		2.0 lb (0.95 kg)	8 weeks
006300-007	PIR9400A3LAB	3/4 in	AL	AL				CEPEL	2.0 lb (0.95 kg)	8 weeks
006300-008	PIR9400S2LPK	20mm	SS	Plastic				SAA	4.0 lb (1.8 kg)	8 weeks
006300-009	PIR9400S3LPB	3/4 in	SS	Plastic				CEPEL	4.0 lb (1.8 kg)	8 weeks
006300-902	PIR9400A2LA0-R	20mm	AL	AL				RUSS	2.0 lb (0.95 kg)	8 weeks
006300-904	PIR9400S2LP0-R	20 mm	SS	Plastic				RUSS	4.0 lb (1.8 kg)	8 weeks
006300-011	PIR9400S3LP0H (1)	3/4 in	SS	Plastic	X	X	X		4.0 lb (1.8 kg)	8 weeks
006300-012	PIR9400S2LP0H (1)	20 mm	SS	Plastic	X	X	X		4.0 lb (1.8 kg)	8 weeks
006300-013	PIR9400A2LAOH	20 mm	AL	AL				SAA	4.0 lb (1.8 kg)	8 weeks

(1) Plastic baffle units with hydrophobic filter. All other plastic baffles supplied without hydro filter. All aluminum baffles include hydrophobic filter.

PointWatch® PIR9400 Infrared Hydrocarbon Detector Spare Parts

Base Wire Assembly Only

Part Number	Use With	Conduit Entry	Material	Ship Weight	Delivery
SP006298-001	PIR9400A3LA0	3/4"	AL	8 oz (0.23 kg)	4 weeks
SP006298-002	PIR9400A2LAO	20 mm	AL	8 oz (0.23 kg)	4 weeks
SP006298-003	PIR9400S2LAO	3/4"	SS	8 oz (0.23 kg)	4 weeks
SP006298-004	PIR9400S2LAO	20 mm	SS	8 oz (0.23 kg)	4 weeks
SP006298-005	PIR9400A3LPO	3/4"	AL	8 oz (0.23 kg)	4 weeks
SP006298-006	PIR9400A2LPO	20 mm	AL	8 oz (0.23 kg)	4 weeks
SP006298-007	PIR9400A3LAB	3/4"	AL	8 oz (0.23 kg)	4 weeks
SP006298-008	PIR9400S2LPK	20 mm	SS	8 oz (0.23 kg)	4 weeks
SP006298-009	PIR9400S3LPB	3/4"	SS	8 oz (0.23 kg)	4 weeks

IR Module (No baffles or wiring assembly included.)

Part Number	Use With	Hydrophobic Filter	Material	Ship Weight	Delivery
SP006487-004	AL PointWatch, AL Baffle	X	AL	1 lb (0.46 kg)	4 weeks
SP006487-005	SS PointWatch		SS	1 lb (0.46 kg)	4 weeks
SP006487-006	AL PointWatch, Plastic Baffle		AL	1 lb (0.46 kg)	4 weeks
SP006836-001	AL PointWatch, Plastic Baffle, Acetone	X	AL	1 lb (0.46 kg)	4 weeks

PIR9400 Miscellaneous Parts

Part Number	Description	Ship Weight	Delivery
006672-001	PIR9400 Calibration windshield bag	8 oz (0.23 kg)	4 weeks
006876-001	Hydrophobic Screen Kit	8 oz (0.23 kg)	4 weeks
102823-001	Nozzle cap, silicon (PIR9400S)	8 oz (0.23 kg)	4 weeks
006743-001	Threaded Cal Tubing Adapter (PIR9400A only)	8 oz (0.23 kg)	4 weeks
006680-001	Silicone grease	8 oz (0.23 kg)	4 weeks
103035-001	Plastic cap for calgas inlet fitting (PIR9400A)	8 oz (0.23 kg)	4 weeks
006873-001	Plastic weather baffle, (PIR9400S)	8 oz (0.23 kg)	8 weeks
006548-004	Outer weather baffle only (alum)	8 oz (0.23 kg)	4 weeks
006506-001	SS slip ring	8 oz (0.23 kg)	4 weeks
102740-002	Calibration magnet	8 oz (0.23 kg)	4 weeks
162552-002	Regulator, 2.5 LPM flow	8 oz (0.23 kg)	4 weeks

Note: Calibration magnet is provided on the order with a PIR9400/U9500

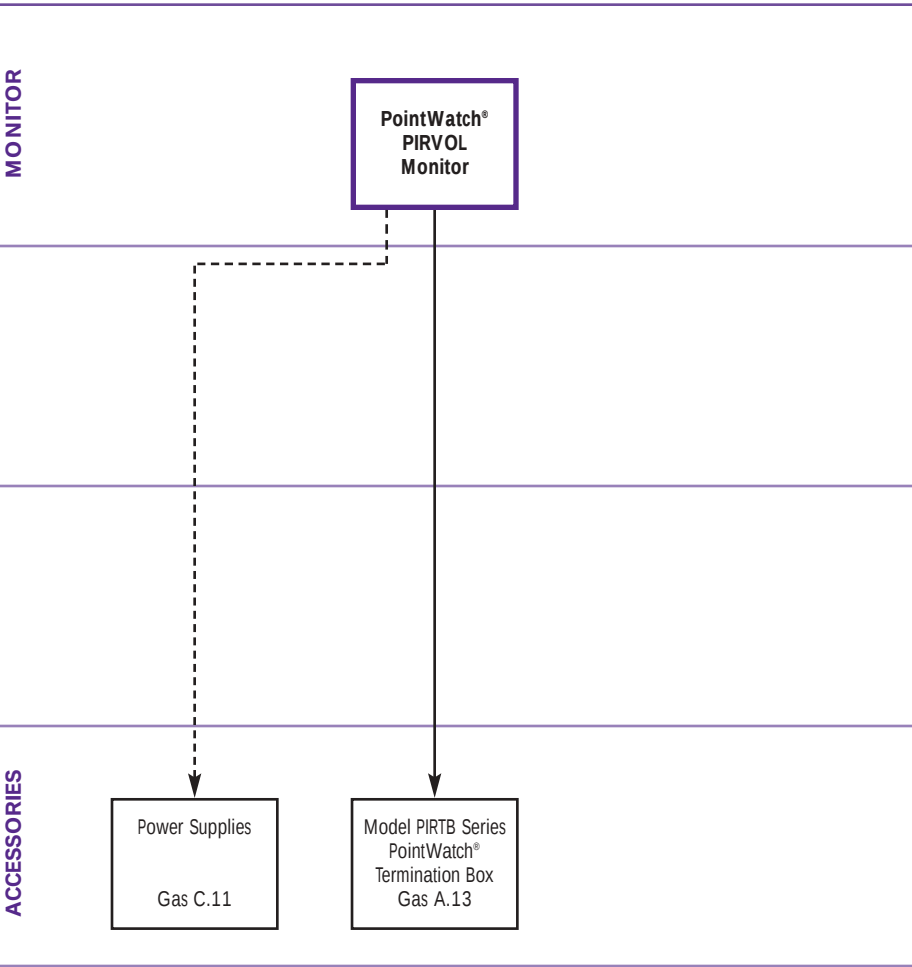
PointWatch® PIRVOL Infrared Hydrocarbon Process Monitor



PointWatch® PIRVOL

PointWatch® PIRVOL Infrared Hydrocarbon Process Monitor (Spec Sheet: 90-1137) is a point-type infrared process monitor that provides continuous monitoring of methane gas in the range of 0 to 100% by volume. Provides a 4 to 20 milliampere output signal and is factory-calibrated to methane gas only. Intended for use in extractive sampling systems where hydrocarbon gas levels are likely to be above the Lower Explosive Limit (LEL). Aluminum or stainless steel housing with delrin plastic sampling enclosure. Brass compression fittings are provided for 1/4" o.d. sample stream tubing. External sampling system devices not included.

PointWatch® PIRVOL



KEY: — = Required - - - - - = Option —●— = Choice Required

Combustible Gas A.9

PointWatch® PIRVOL Infrared Hydrocarbon Process Monitor

Pointwatch PIRVOL Infrared Hydrocarbon Process Monitor

MODEL	TYPE	Material	
PIRVOL	A	Aluminum	
	S	Steel	
	TYPE	Type	
	3	3/4" NPT	
	2	M20	
		TYPE	compression fittings
		A	with Sampling Cup
		B	only)
		TYPE	APPROVALS
		1	standards

PointWatch® PIRVOL

PointWatch PIRVOL All Models

Part Number	Description
Model PIRVOLA3A1 (007129-001)	AL, 3/4" NPT, with cup
Model PIRVOLA2A1 (007129-003)	AL, 20mm, with cup
Model PIRVOLS3A1 (007129-002)	SS, 3/4" NPT, with cup
Model PIRVOLS2A1 (007129-004)	SS,20mm, with cup

PointWatch PIRVOL IR Modules Only

Part Number	Description
Model PIRVOLA3B1 (007129-005)	AL, 3/4" NPT, without cup
Model PIRVOLA2B1 (007129-007)	AL, 20mm, without cup
Model PIRVOLS3B1 (007129-006)	SS, 3/4" NPT, without cup
Model PIRVOLS2B1 (007129-008)	SS,20mm, without cup

PointWatch PIRVOL Spare Parts

Part Number	Description
007128-001	Sample draw cup with O-rings and fittings
007128-002	O-ring kit (3 ea. O-rings)
006297-003	Hydrophobic screen for PIRVOL

U9500H Infiniti® HC – PointWatch® Transmitter

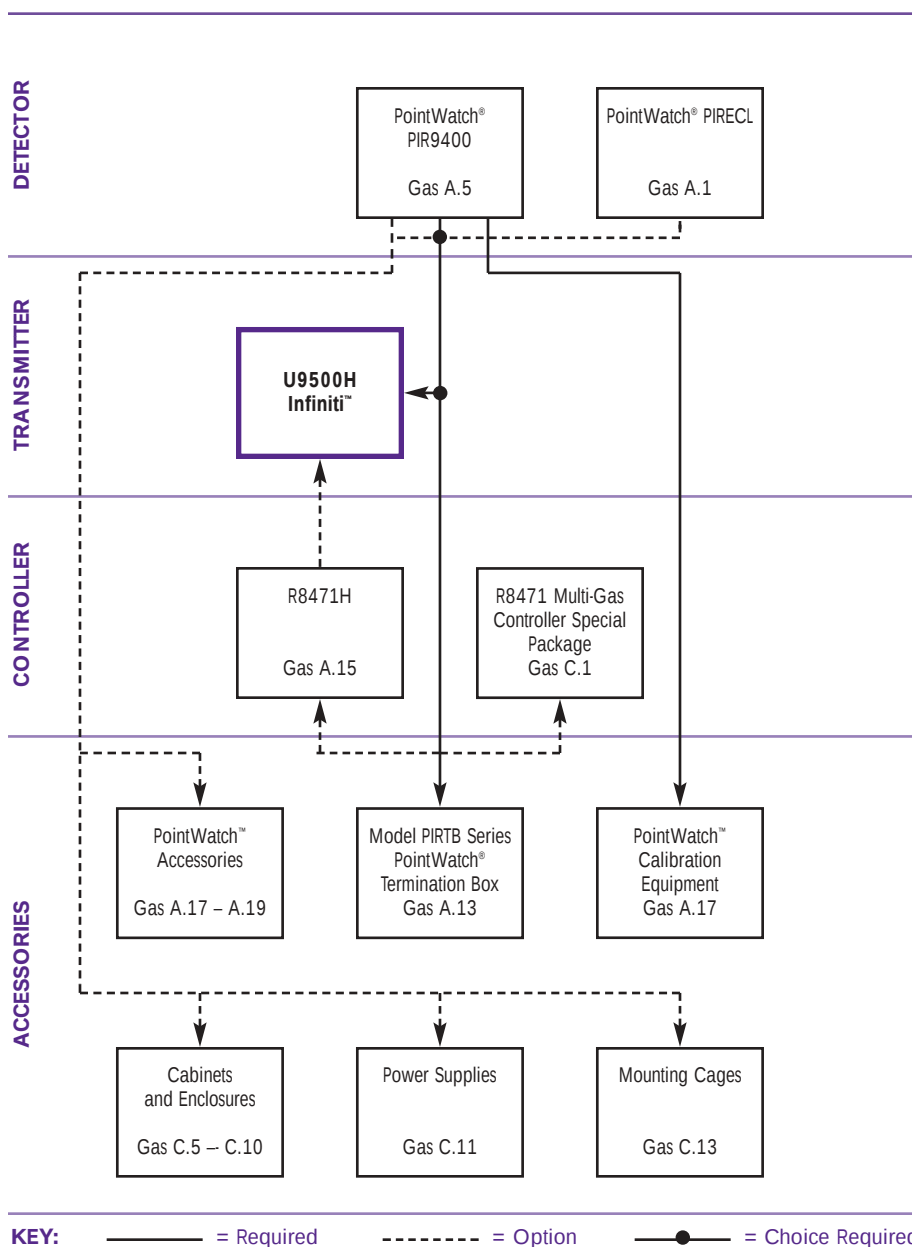


U9500 Infiniti® HC

U9500H Infiniti® HC – PointWatch® Transmitter (Spec Sheet: 90-1099). For use with a single Det-Tronics PointWatch® Eclipse or PIR9400 Infrared Hydrocarbon gas detector.

- Linear isolated 4-20 mA output
- Eight character LCD display
- Non-intrusive automatic calibration
- Easy push button configuration
- Base version provides analog output only
- Optional relay package (three alarm, one fault)
- Extensive fault diagnostics
- Two-, three- or five-port junction box option
- Stainless steel or aluminum junction box option
- Optional reset/calibration pushbutton is preinstalled on some junction boxes (recommended where magnets are not preferred)

U9500H Infiniti®



Combustible Gas A.11

U9500H Infiniti® PIR9400 Transmitters and Junction Boxes (must be ordered separately)

Part Number	OS Number	J-box	Ports*	Conduit Entry**	Relays	Material	FM	CSA	CEN	SAA	RUS	Ship Weight	Delivery
006265-003	U9500H6002	n/a	n/a	n/a	X	n/a	X	X	X	X		1 lb (.46 kg)	8 weeks
006265-009	U9500H6004						X	X	X	X		1 lb (.46 kg)	8 weeks
006265-903	U9500H6002-R								X		X	1 lb (.46 kg)	8 weeks
006265-909	U9500H6004-R								X		X	1 lb (.46 kg)	8 weeks
006264-013	n/a	X	2 (L)	3/4 in	n/a	AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-014		X	2 (L)	20 mm/25 mm		AL			X			3.15 lb (1.43 kg)	8 weeks
006264-017		X	2 (L)	3/4 in		SS	X	X				9.5 lb (4.3 kg)	8 weeks
006264-018		X	2 (L)	20 mm		SS			X			9.5 lb (4.3 kg)	8 weeks
006264-027		X	2 (L)	20 mm/25 mm		AL				X		3.15 lb (1.43 kg)	8 weeks
006264-029		X	5	3/4 in		AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-025		X	3	3/4 in		AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-031		X	3	20 mm		AL			X			3.15 lb (1.43 kg)	8 weeks
006264-032		X	5	20 mm		AL			X			3.15 lb (1.43 kg)	8 weeks
006264-033		X	3	3/4 in Push Button^		AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-034		X	5	3/4 in Push Button^		AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-035		X	3	3/4 in Push Button^		SS	X	X				9.5 lb (4.3 kg)	8 weeks
006264-036		X	5	3/4 in Push Button^		SS	X	X				9.5 lb (4.3 kg)	8 weeks
006264-037		X	2 (L)	3/4 in		AL	X	X	X			9.5 lb (4.3 kg)	8 weeks
006264-038		X	3	3/4 in		AL	X	X	X			9.5 lb (4.3 kg)	8 weeks
006264-914		X	2 (L)	20 mm/25 mm		AL					X	9.5 lb (4.3 kg)	8 weeks

* "L" designates 90 degree conduit entry orientation. "ST" designates straight-thru or 180 degree orientation.

** If two numbers are listed, the first number is for detector entry and the second number is for field cabling

^ Explosion-proof pushbutton occupies one of the available conduit entries.

Infiniti® Parts

Part Number	Description	Use With	Ship Weight	Delivery
006809-001	Wire retaining clip	All	8 oz (0.23 kg)	4 weeks
102740-002	Calibration magnet	Infiniti, DCU, PointWatch	8 oz (0.23 kg)	4 weeks
102868-001	Junction box thread grease	All junction boxes	8 oz (0.23 kg)	4 weeks

Model PIRTB Series PointWatch® Termination Box



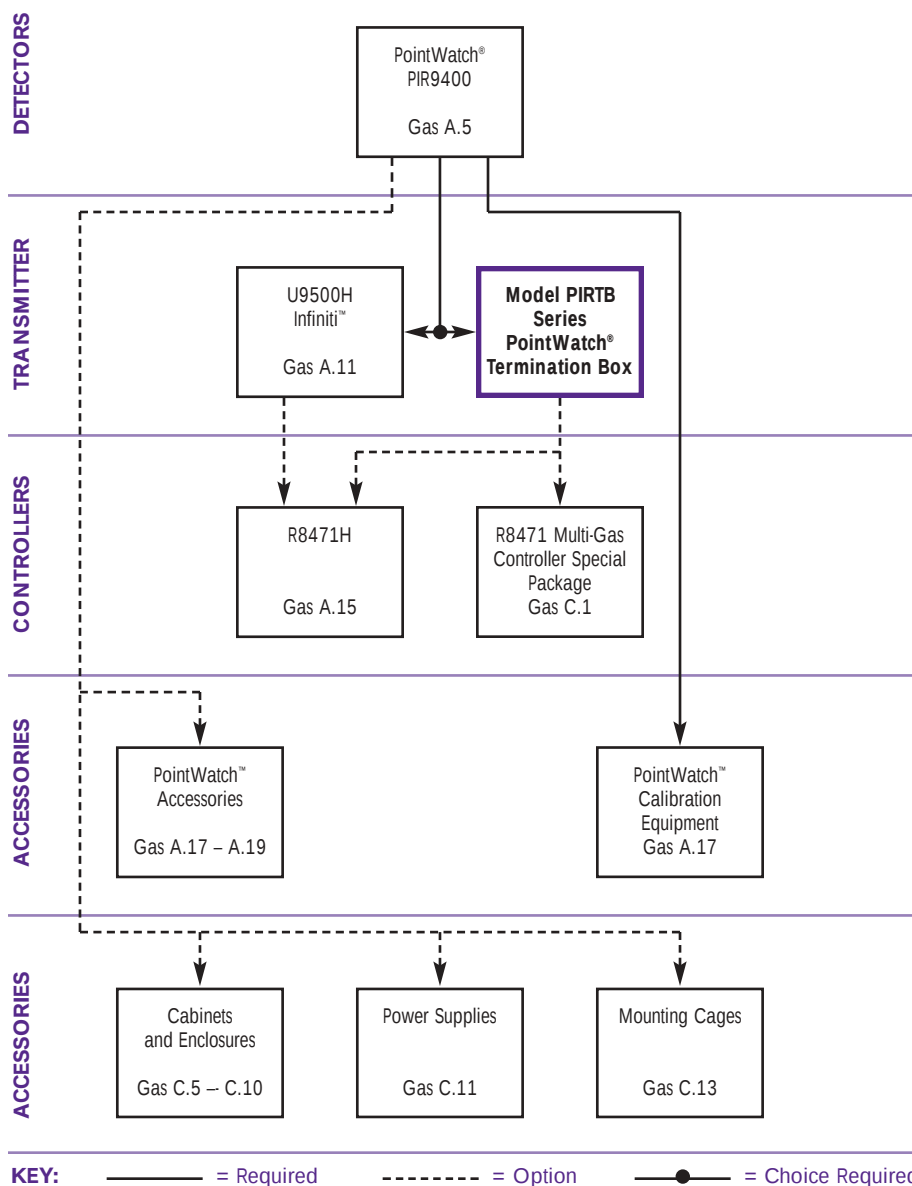
PointWatch®
Termination and Separation
Junction Box



PointWatch®
Termination and Separation
Junction Box

Model PIRTB Series PointWatch® Termination Box.

- Use for stand-alone Pointwatch and U9500H installations. Also compatible with PIRECL when remote calibration initiation capability is required.
- Magnetic reed switch calibration and LED gives calibration feedback
- Tall cover boxes with windows enable one person, non-intrusive calibration
- Short cover boxes without windows require two people to accomplish non-intrusive calibration



Model PIRTB Series PointWatch® Termination Box

Model PIRTB Series

Model PIRTB Series Pointwatch Termination Boxes

OS number	Part Number	Ports*	Conduit Entry**	Cover	Encl Material	FM	CSA	CEN	Other	Ship Weight	Delivery
PIRTBA2NW1L	006414-001	2 (L)	3/4 in	Short	AL	X	X	X		2 lb (0.95 kg)	8 weeks
PIRTBA2MW1L	006414-002	2 (L)	20/25 mm	Short	AL	X	X	X		2 lb (0.95 kg)	8 weeks
PIRTBA2NW2L	006414-003	2 (L)	3/4 in	Tall	AL	X	X	X		2.2 lb (1kg)	8 weeks
PIRTBA2MW2L	006414-004	2 (L)	20/25 mm	Tall	AL	X	X	X		2.2 lb (1kg)	8 weeks
PIRTBA2MK1L	006414-005	2 (L)	20/25 mm	Short	AL				SAA	2 lb (0.95 kg)	8 weeks
PIRTBA2MK2L	006414-006	2 (L)	20/25 mm	Tall	AL				SAA	2.2 lb (1kg)	8 weeks
PIRTBS2NW1I	006414-007	2 (L)	3/4 in	Short	SS	X	X	X		9 lb (4.1 kg)	8 weeks
PIRTBS2MW1L	006414-008	2 (L)	20/25 mm	Short	SS	X	X	X		9 lb (4.1 kg)	8 weeks
PIRTBA2NW1L	006414-009	2 (ST)	3/4 in	Short	AL	X	X	X		2 lb (0.95 kg)	8 weeks
PIRTBS2MW3L	006414-010	2 (L)	20/25 mm	Tall	SS	X	X	X		9 lb (4.1 kg)	8 weeks
PIRTBA3NW2T	006414-011	3(T)	3/4in	Tall	AL	X	X	X		2.2 lb (1kg)	8 weeks
PIRTBA3MW2T	006414-012	3(T)	20/25 mm	Tall	AL	X	X	X		2.2 lb (1kg)	8 weeks
PIRTBSW2N3L	006414-014	2(L)	3/4 in	Tall	SS	X	X	X		9 lb (4.1 kg)	8 weeks
PIRTBA2MR1L	006414-902	2(L)	20/25 mm	Short	AL				RUS	2 lb (0.95 kg)	8 weeks
PIRTBA2MR2L	006414-904	2(L)	3/4in	Tall	AL				RUS	2.2 lb (1kg)	8 weeks

* "L" designates 90 degree conduit entry orientation, "ST" designates straight-through or 180 degree conduit entry orientation

"T" designates 3-port orientation

** If two numbers are listed, the first number is for detector entry and the second number is for field cabling

J-box Replacement Part

Part Number	Description	Ship Weight	Use With	Delivery
102868-001	Thread grease	8 oz (0.23 kg)	All J-boxes	4 weeks
SP006412-001	PIR J-box terminal PC bd	8 oz (0.23 kg)	All J-boxes	4 weeks
102740-002	Cal magnet	8 oz (0.23 kg)	All J-boxes	4 weeks

R8471H Single Channel Rack-Mounted PointWatch® Gas Controller



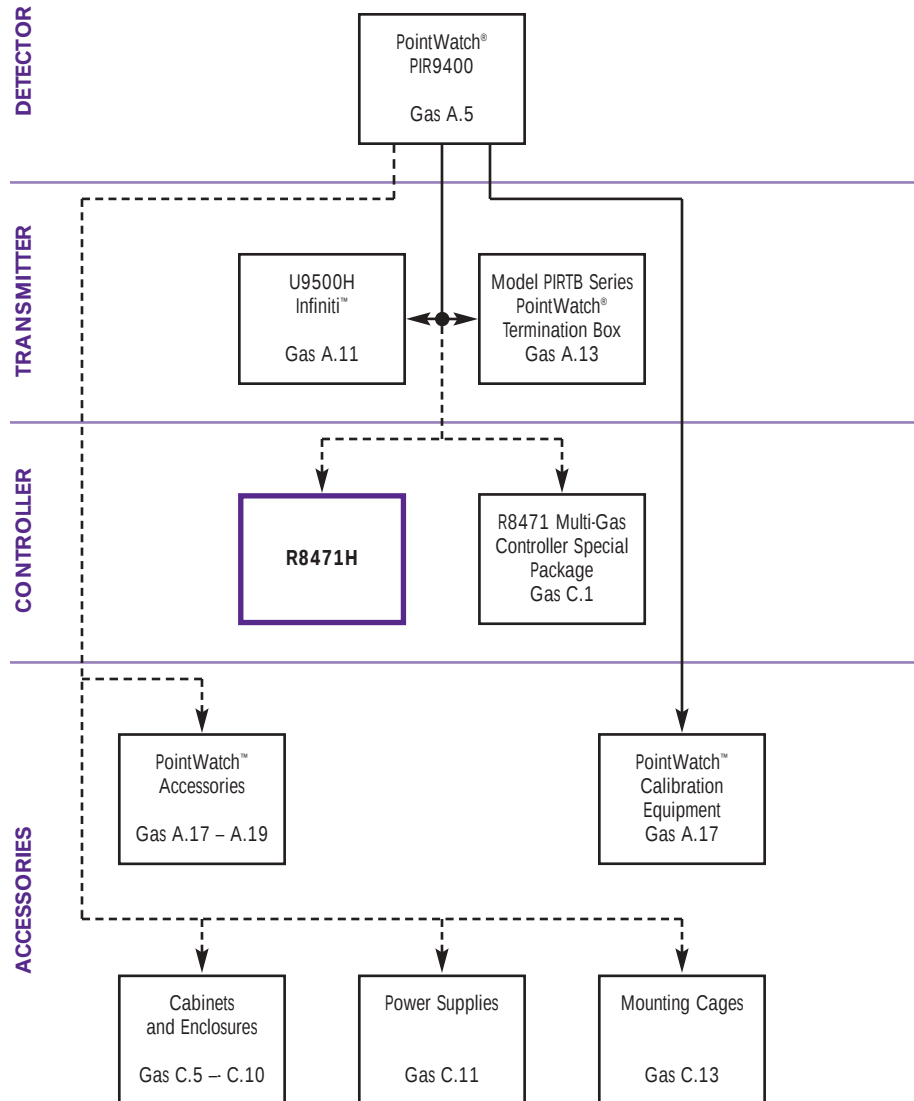
R8471H

R8471H Single Channel Rack-Mounted PointWatch® Gas Controller (Manual: 95-8475). Use with one PIR9400.

Features include:

- Digital and bar graph displays
- Individual low, high auxiliary, and fault alarm outputs
- Standard model offers open collector outputs only
- Premium model offers 4-20 mA output and relay package
- Supports remote calibration capability
- Offered factory-installed in Q2050 Enclosure; see page L.3
- Panel Mount versions are available; see page L.6
- *Compatible with U9500H Ininiti®/PointWatch® Infrared gas detector.*

NOTE 1: Other Det-Tronics combustible gas controllers are compatible with the PointWatch® 4 to 20 mA signal output. However, temporary fault condition is likely to occur on these controllers during the stand-alone PointWatch® calibration procedure.



KEY: — = Required - - - - - = Option —●— = Choice Required

R8471H Single Channel Rack Mounted Combustible Gas Controller

Part Number	OS Number	Base Model: O.C. Output	Premium Model: 4- 20 mA Output and Relays	LFL Range	Ht Config	Ht	FM	CSA	RUS	Ship Weight	Delivery
005479-017	R8471H1002	X		0 - 100%	4U	7.0 in	X	X		4 lb(1.9 kg)	4 weeks
005479-018	R8471H1004		X	0 - 100%	4U	7.0 in	X	X		4 lb(1.9 kg)	4 weeks
005478-017	R8471H1001	X		0 - 100%	3U	5.25 in	X	X		4 lb(1.9 kg)	8 weeks
005478-018	R8471H1003		X	0 - 100%	3U	5.25 in	X	X		4 lb(1.9 kg)	8 weeks
005479-918	R8471H1004-R		X	0 - 100%	4U	7.0 in			X	4 lb(1.9 kg)	8 weeks

NOTE: Requires Q4004 mounting cage (sold separately).

Accessories: Calibration Kits, Calibration Bag and Sample Draw Assembly



PointWatch® Calibration Kits



PointWatch® Eclipse PIRECL Windshield Calibration Bag

PointWatch® Calibration Kits. A sturdy carrying case containing:

- Two 3.6 cubic ft (103 liters) cylinders of specified gas
- Special regulator pressure indicator, 3-Foot tube
- Calibration Wind Shield bag

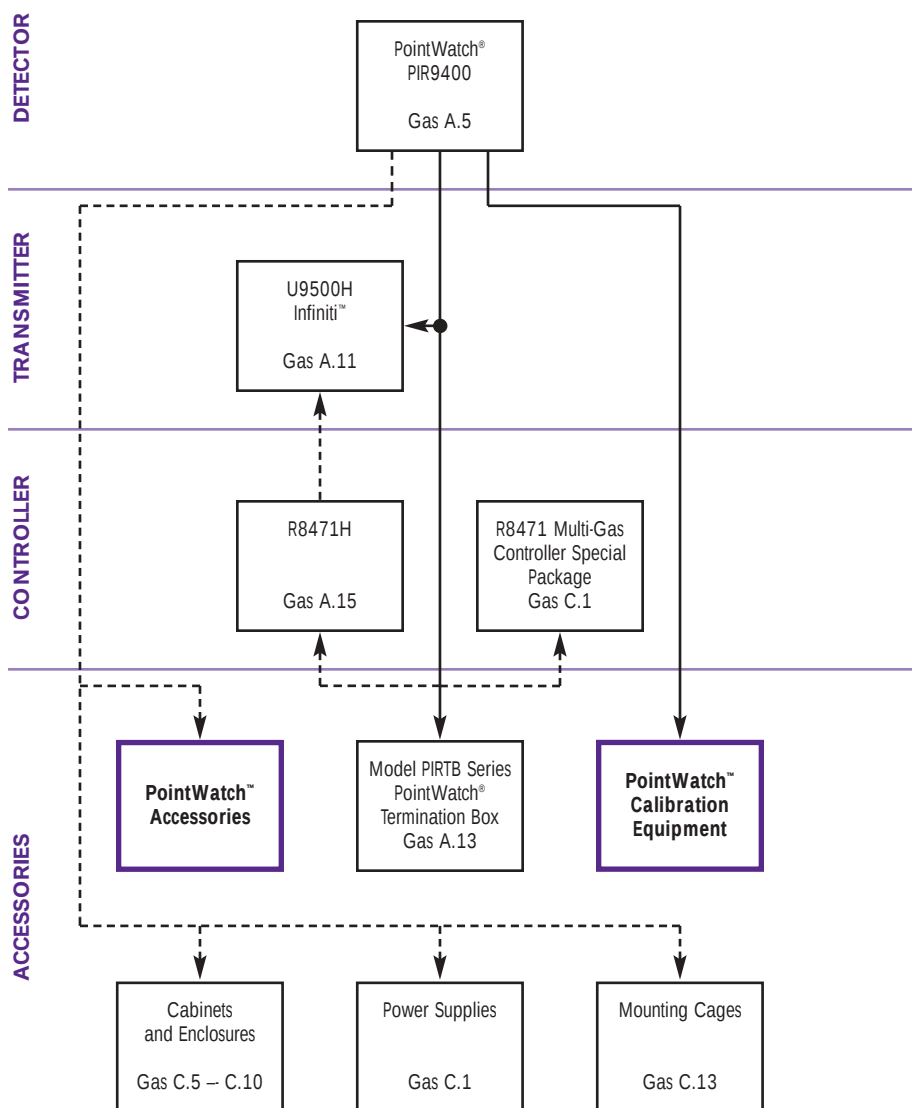
PointWatch® Windshield Calibration Bag enables calibration to be completed in high wind conditions. Secured in place with velcro sealing strap. Calibration gas inlet nozzle enables gas flow into detector.

NOTE: There is one version for PointWatch® PIR9400 and one version for PointWatch® Eclipse. They are not interchangeable.

PointWatch® Sample Draw Assembly. A sealed sample enclosure enabling use of PointWatch® PIR9400 within a gas sample extraction system. Additional hardware required for proper performance. Requires removal of standard baffle assembly. Not compatible with PointWatch® Eclipse.



PointWatch® Sample Draw Assembly



KEY: — = Required - - - - - = Option —●— = Choice Required

Accessories: Calibration Kits, Calibration Bag and Sample Draw Assembly

PointWatch® Calibration Kits

Part Number	Gas	LFL	% Vol	Ship Weight	Delivery
006468-001	Methane	50%	2.5	11.5 lb (5.23 kg)	4 weeks
006468-002	Ethane	50%	1.5	11.5 lb (5.23 kg)	4 weeks
006468-003	Ethylene	50%	1.35	11.5 lb (5.23 kg)	4 weeks
006468-004	Propane	50%	1.1	11.5 lb (5.23 kg)	4 weeks
006468-005	Propylene	50%	1	11.5 lb (5.23 kg)	4 weeks

PointWatch® Calibration Kit Replacement Parts

Part Number	Description	Ship Weight	Delivery
162552-002	Regulator, 2.5 LPM	8 oz (0.23 kg)	8 weeks
006672-001	PIR9400 Calibration windshield bag	8 oz (0.23 kg)	8 weeks
006672-002	PIRECL Eclipse calibration windshield	8 oz (0.23 kg)	8 weeks
162553-001	Carrying Case	8 oz (0.23 kg)	8 weeks
101678-007	3 Foot tubing	8 oz (0.23 kg)	4 weeks

PointWatch® Sample Draw Assembly

Part Number	Compression Fitting	Material	Ship Weight	Delivery
006629-002	X	AL	3.5 lb (1.6 kg)	8 weeks
006629-004	X	SS	3.5 lb (1.6 kg)	8 weeks

NOTE: PointWatch is NOT included.

Accessories: Direct Duct Mount and Model Q810 Duct Mount Enclosure



PointWatch®
Direct Duct Mount



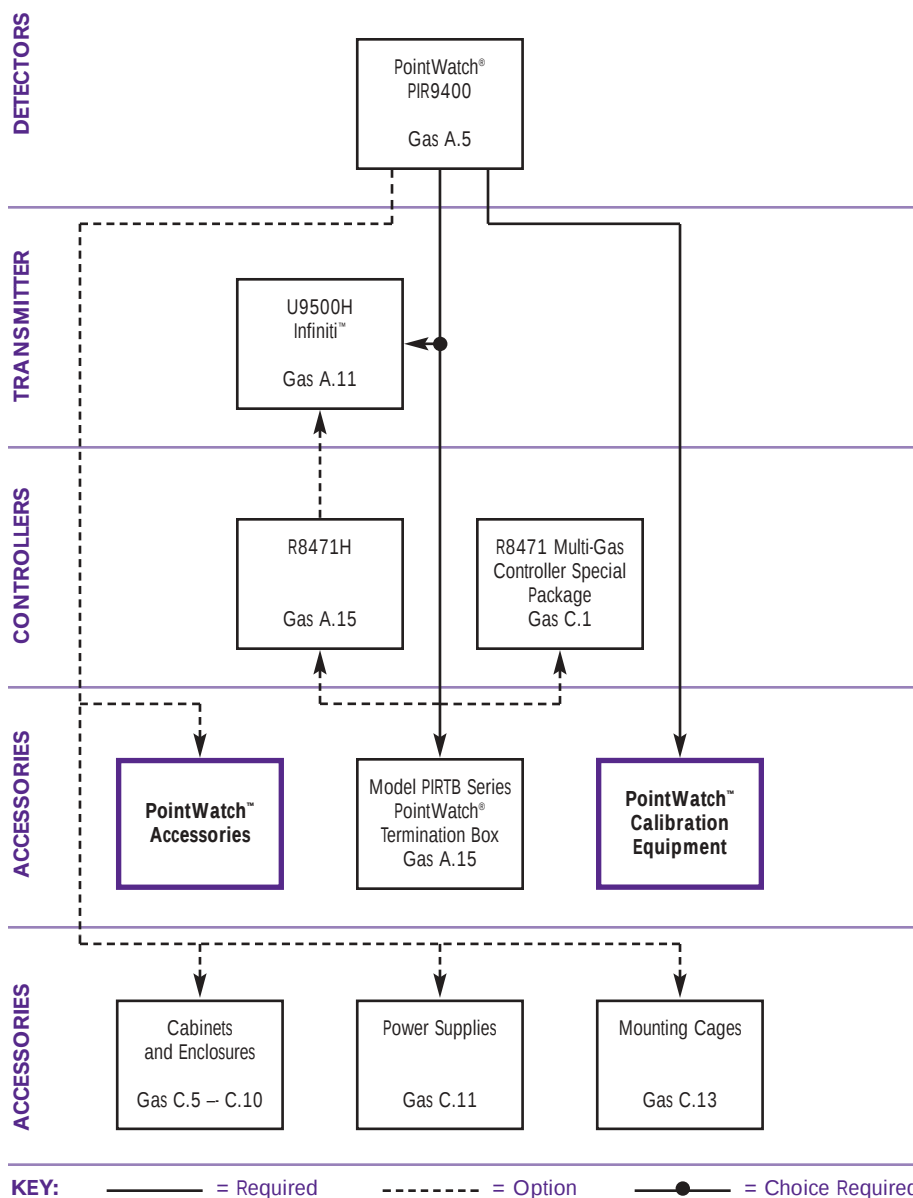
PointWatch®
Model Q810
Duct Mount Enclosure

PointWatch® Direct Duct Mount. Enables direct mounting of PointWatch® PIR9400 Infrared Hydrocarbon gas detector within air handling ductwork. Contains:

- PointWatch®-modified
- Mounting plate, adapters, and fittings to apply test gas to PointWatch® without removal

PointWatch® Model Q810 Duct Mount Enclosure (Manual: 95-8459). Designed to provide hydrocarbon gas detection in air handling, heating, ventilating and air conditioning ducts. Specially-modified PointWatch® included.

- Mounts to a flat duct wall surface
- A stainless steel sampling tube spans the cross section of the duct and a 1 foot tube returns the sample
- Allows large volume, continuous air sampling
- Requires a 600 – 4000 fpm velocity
- Stainless steel NEMA 4X enclosure



Accessories: Direct Duct Mount and Model Q810 Duct Mount Enclosure

PointWatch Duct Mount

Part Number	Conduit Entry	Material	Ship Weight	Delivery
006575-001	3/4 in	AL	5.5 lb (2.5 kg)	8 weeks
006575-002	3/4 in	SS	7.5 lb (3.4 kg)	8 weeks
006575-003	20 mm	AL	5.5 lb (2.5 kg)	8 weeks
006575-004	20 mm	SS	7.5 lb (3.4 kg)	8 weeks

NOTE: Not for use in high temperature or dirty applications.

PointWatch® Model Q810 Duct Mount Enclosure

Part Number	Tube Length	PW Material	Ship Weight	Delivery
006739-001	*	AL	10 lb (4.5 kg)	8 Weeks
000810-002	*	SS	12 lb (5.5 kg)	8 Weeks
000810-003**	*	AL	10 lb (4.5 kg)	8 Weeks

* Price includes PointWatch® and one inlet and one return tube (please specify inlet length with order).

** 000810-003 model is for acetone.

PointWatch® Model Q810 Duct Mount Enclosure Spare Tubes

Part Number	Tube Length	PW Material	Ship Weight	Delivery
000214-126	1 In	SS	8 oz (0.23 kg)	8 Weeks
000214-127	3 ft	SS	8 oz (0.23 kg)	8 Weeks
000214-128	6 ft	SS	8 oz (0.23 kg)	8 Weeks
000214-129	10 ft	SS	8 oz (0.23 kg)	8 Weeks
000214-130	1 ft return	SS	8 oz (0.23 kg)	8 Weeks

NOTE: Price reflects tubing only.

Open Path Eclipse Infrared Gas Detection System

Open Path Eclipse Infrared Gas Detection System

Please replace with product pricing page insert when received. (Expected Quarter 1, 2003.)

Open Path Eclipse Infrared Gas Detection System

Open Path Eclipse

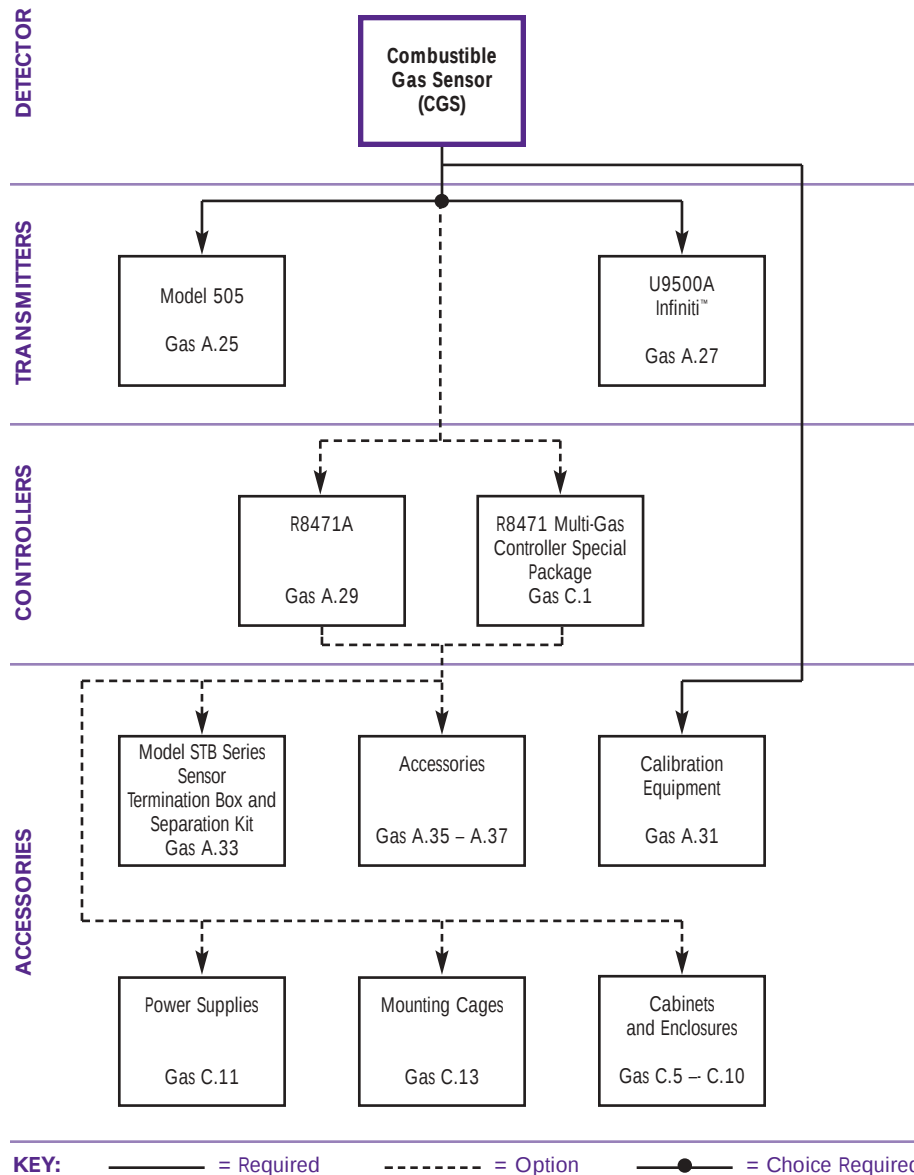
Combustible Gas Sensor (CGS)



Combustible Gas Sensor

Combustible Gas Sensor (CGS) (Spec Sheet: 90-1041). Stainless steel catalytic sensor that provides an accurate measurement of combustible gas concentration in the % LFL range. Requires Model 505, U9500A or DCUEX transmitter.

- Constant current or constant voltage options available.
- Poison resistant construction
- 3/4" or 20 mm thread option
- Wire lead options of 6" or 30"
- Variety of accessories available
- Two year rolling warranty



Combustible Gas Sensor for 505, 500, K Series (constant voltage) Transmitters

Part Number	Replaces	OS Number	Threads	Wire lead length	FM	CSA	CEN	Other	Ship Weight	Delivery
006824-002	225006-002, 225957-001, 226530-001, 226531-001, 226931-001, 226931-002, 226999-002, 226999-004, 223106-002	CGSS1A6V2R1X	3/4 in	6 in	X	X	X		1 lb (0.46 kg)	4 weeks
006824-006	225006-005, 226530-004, 226531-002, 226931-003, 226931-004	CGSS1A3V2R1X	3/4 in	30 in	X	X	X		1 lb (0.46 kg)	4 weeks
006824-004	226999-010, 226999-013, 226999-018, 226999-019	CGSS1C6V2R1X	20 mm	6 in	X	X	X		1 lb (0.46 kg)	4 weeks
006824-008		CGSS1C3V2R1X	20 mm	30 in	X	X	X		1 lb (0.46 kg)	4 weeks
006824-032		CGSS1A6V2H1X	3/4 in	6 in	X	X	X	NASA	1 lb (0.46 kg)	8 weeks
006824-904		CGSS1C6V2R1R	20 mm	6 in	X	X	X	RUSS	1 lb (0.46 kg)	4 weeks

NOTE: Units require a transmitter (sold separately).

Combustible Gas Sensor for U9500A, U8700H, U8700G, 400, 405 (constant current) Transmitters

Part Number	Replaces	OS Number	Threads	Wire lead length	FM	CSA	CEN	Other	Ship Weight	Delivery
006824-001	225006-004, 225957-002, 226530-003, 226531-003, 226931-005, 226931-006, 226999-011, 226999-012	CGSS1A6C2R1X	3/4 in	6 in	X	X	X		1 lb (0.46 kg)	4 weeks
006824-005	225006-003, 226530-005, 226531-004, 226931-007, 226931-008	CGSS1A3C2R1X	3/4 in	30 in	X	X	X		1 lb (0.46 kg)	4 weeks
006824-003	226999-008, 226999-020, 226999-014, 226999-021	CGSS1C6C2R1X	20 mm	6 in	X	X	X		1 lb (0.46 kg)	4 weeks
006824-007	226999-015	CGSS1C3C2R1X	20 mm	30 in	X	X	X		1 lb (0.46 kg)	4 weeks
006824-031		CGSS1A6C2H1X	3/4 in	6 in	X	X	X	NASA	1 lb (0.46 kg)	4 weeks
006824-903		CGSS1C6C2R1R	20 mm	6 in	X	X	X	RUSS	1 lb (0.46 kg)	4 weeks

NOTE: Units require a transmitter (sold separately).

Combustible Gas Sensor Replacement Parts

Part Number	Description	Use With	Ship Weight	Delivery
005418-003	Connector bd separation kit J-Box	Infiniti, 8700	8 oz (0.23 kg)	4 weeks
006470-001	Wiring harness for sensor sep kit	Infiniti	8 oz (0.23 kg)	8 weeks
101678-007	3 foot tubing	Cal Kits	8 oz (0.23 kg)	8 weeks
107427-037	O-ring for remote cal cup	Cal Kits	8 oz (0.23 kg)	4 weeks
162553-001	Carrying Case	Cal Kits	1 lb (2.2 kg)	4 weeks
225333-001	Calibration screwdriver for remote calibration transmitter	505,500,K	8 oz (0.23 kg)	4 weeks
226367-001	Transmitter extender plug	505,500,K	8 oz (0.23 kg)	4 weeks
226462-001	Shorting plug separation kits	505, K	8 oz (0.23 kg)	8 weeks
226757-001	Connector bd separation kit J-Box	505, 500, K	8 oz (0.23 kg)	4 weeks
226758-001	Cal meter extension cable	505, K	8 oz (0.23 kg)	8 weeks

Model 505 Combustible Transmitter



Model 505

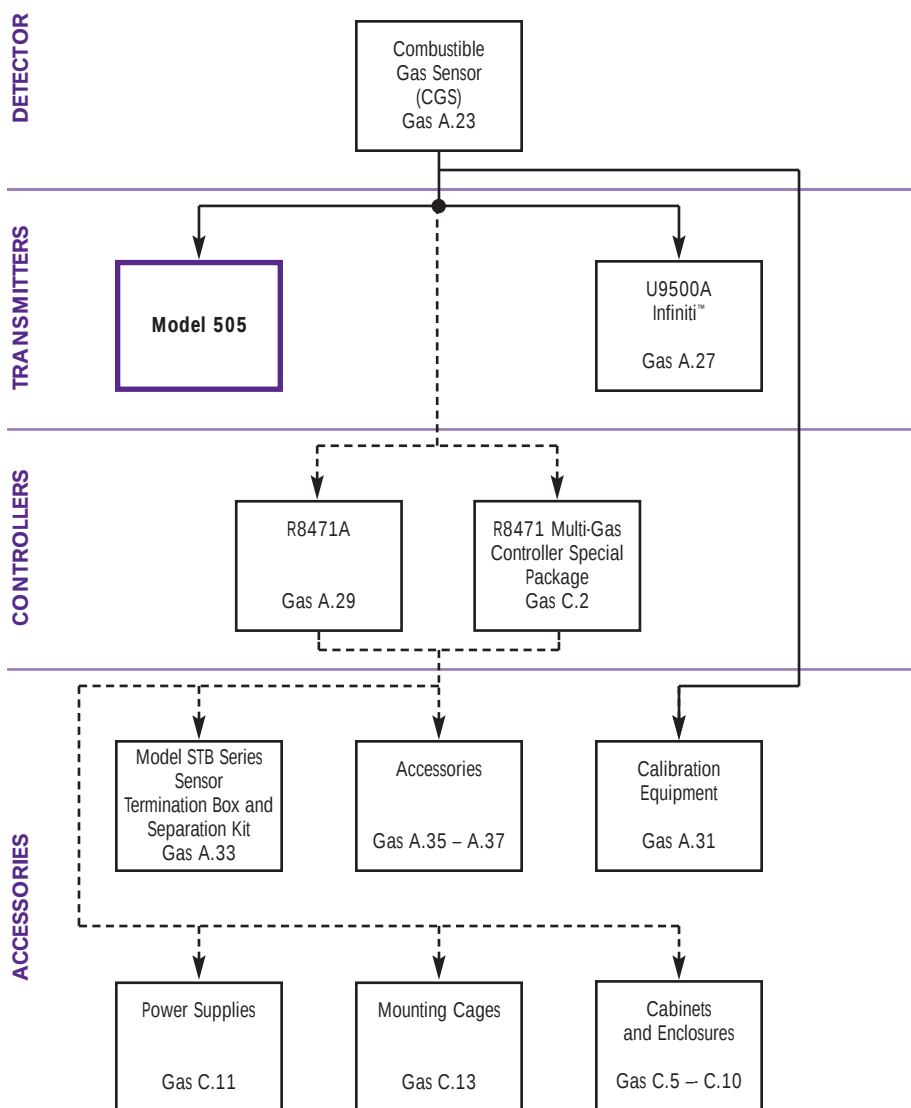
Model 505 Combustible Transmitter (Spec Sheet: 90-1114). Designed for use with CGS sensor, the 505 provides an analog signal output representing gas concentration typically routed to a gas controller, PLC or similar analog input signal receiver.

- 4-20 mA output
- Sensor sensitivity check function
- One person calibration
- Includes a variety of j-box options

Retrofit Kits are available to upgrade an existing K Series or Model 500 transmitter to the Model 505 transmitter using existing junction boxes and field wiring. The kit consists of:

- A transmitter board
- A label with calibration instructions for the junction box cover
- Instruction manual

NOTE: No junction box included.



KEY: — = Required - - - - - = Option —●— = Choice Required

Model 505 Combustible Transmitter and Junction Box

OS Number	Part Number	Replaces	Conduit Entry**	Ohm Output	Encl Material	FM	CSA	CEN	Ports*	Ship Weight	Delivery
505A2A2A1A	006748-001	226585-001, 226555-113	3/4 in	125	AL	X	X		2 - ST	8 oz (0.23 kg)	4 weeks
505A3A2A1A	006748-002	226585-001, 226555-101	3/4 in	125	AL	X	X		2 - L	8 oz (0.23 kg)	4 weeks
505A2C2A1E	006748-003		20 mm	125	AL	X	X	X	2 - ST	8 oz (0.23 kg)	8 weeks
505A3C2A1E	006748-004	226585-001, 226555-107	20 mm/25 mm	125	AL	X	X	X	2 - L	8 oz (0.23 kg)	8 weeks
505A2A2B1A	006748-005	226673-001, 226555-113	3/4 in	500	AL	X	X		2 - ST	8 oz (0.23 kg)	4 weeks
505A3A2B1A	006748-006	226673-001, 226555-101	3/4 in	500	AL	X	X		2 - L	8 oz (0.23 kg)	4 weeks
505A2C2B1E	006748-007		20 mm	500	AL	X	X	X	2 - ST	8 oz (0.23 kg)	8 weeks
505A3C2B1E	006748-008	226673-001, 226555-107	20 mm/25 mm	500	AL	X	X	X	2 - L	8 oz (0.23 kg)	8 weeks
505S3A2A1A	006748-009	226585-001, 226555-111	3/4 in	125	SS	X	X		2 - L	8 oz (0.23 kg)	8 weeks
505S3C2A1E	006748-010	226585-001, 226555-112	20 mm	125	SS	X	X	X	2 - L	8 oz (0.23 kg)	8 weeks
505S3A2B1A	006748-011	226673-001, 226555-111	3/4 in	500	SS	X	X		2 - L	8 oz (0.23 kg)	8 weeks
505S3C2B1E	006748-012	226673-001, 226555-112	20 mm	500	SS	X	X	X	2 - L	8 oz (0.23 kg)	8 weeks
505A4A2A1A	006748-013		3/4 in	125	AL	X	X		3-PORT-T	8 oz (0.23 kg)	8 weeks
505A4C2A1E	006748-014		20 mm	125	AL	X	X	X	3-PORT-T	8 oz (0.23 kg)	8 weeks
505A3C2A1R (1)	006748-904	226585-001, 226555-101	20 mm/25 mm	125	AL			X	2 - L	8 oz (0.23 kg)	4 weeks
505A3C2B1R (1)	006748-908	226673-001, 226555-107	20 mm/25 mm	500	AL			X	2 - L	8 oz (0.23 kg)	8 weeks

(1) 505A3C2A1R & 505A3C2B1R - have Russian approval

* "L" designates 90 degree conduit entry orientation. "ST" designates straight-thru or 180 degree orientation.

** If 2 numbers are listed, the first number is sensor entry, and second number is for field cable entry(ies)

Retrofit Kits

Part Number	For Use With	Ship Weight	Delivery
006818-001	K series-125 ohms	5 oz (0.14 kg)	4 weeks
006818-002	500 model- 500 ohms	5 oz (0.14 kg)	4 weeks

Model 505 Spare Parts

Part Number	Description	Conduit Entry**	Output Load	Encl Material	Port	Ship Weight	Delivery
006817-001	505 pc board	n/a	125 ohms	n/a	n/a	8 oz (0.23 kg)	4 weeks
006817-002	505 pc board		500 ohms			8 oz (0.23 kg)	4 weeks
102883-001	505 Sensor Sep Wiring Terminal Block		n/a			8 oz (0.23 kg)	4 weeks

U9500A Infiniti Combustible Transmitters

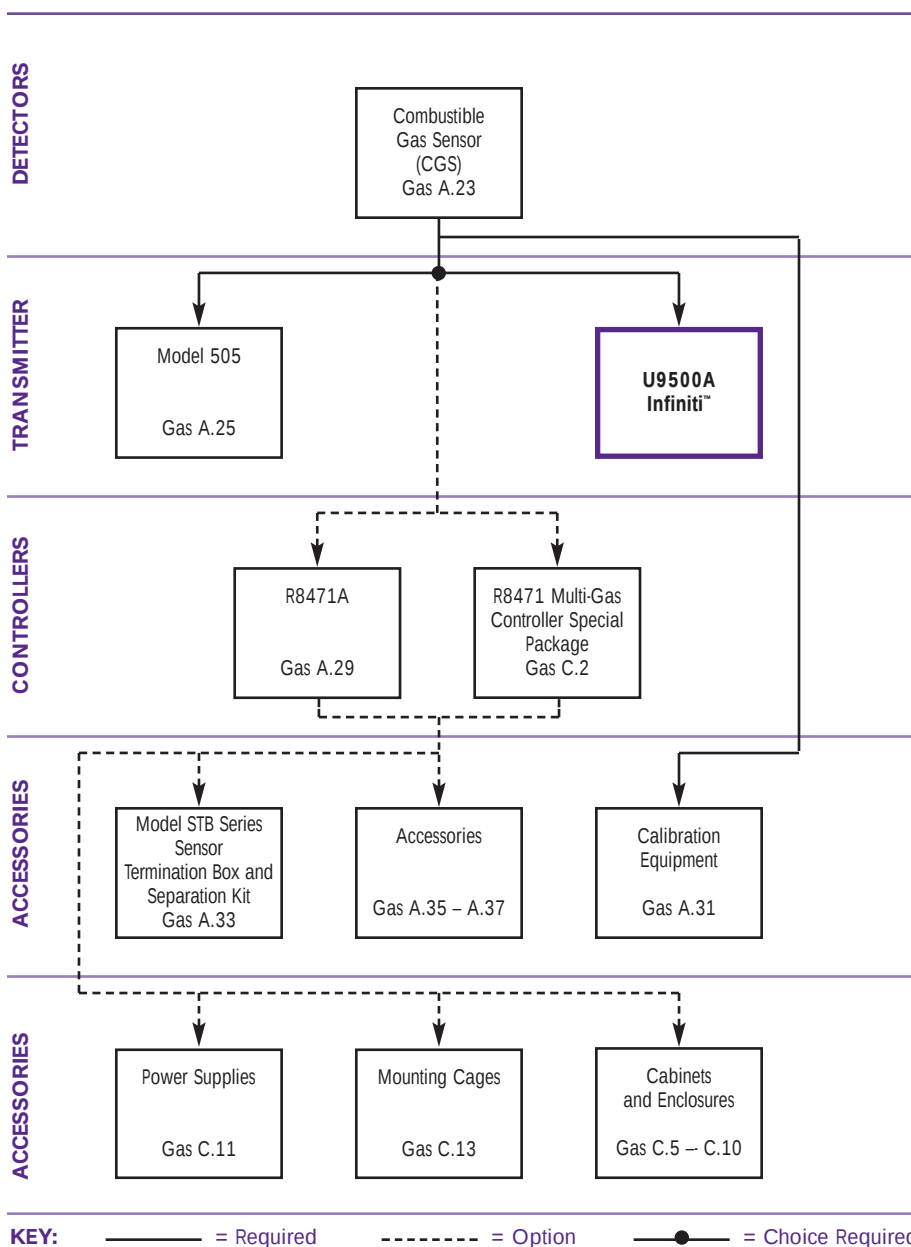


U9500A Infiniti

U9500A Infiniti Combustible Transmitters (Manual: 95-8444). For use with CGS, the Infiniti provides an analog signal output and local display of detected gas level. A number of optional features are also available.

- Linear isolated 4-20 mA output
- Eight character LCD display
- Non-intrusive automatic calibration
- Sensor sensitivity check
- Base version provides analog output only
- Optional relay package (three alarm, one fault)
- Extensive fault diagnostics
- Sensor separation capability
- Optional reset/calibration pushbutton is preinstalled on some junction boxes (recommended where magnets are not preferred)

U9500A Infiniti



U9500A Infiniti® Catalytic Combustible Transmitters & Junction Boxes (must be ordered separately)

Part Number	OS Number	J-box	Ports	Conduit Entry**	Relay	Material	FM	CSA	CEN	SAA	RUS	Ship Weight	Delivery
006265-001	U9500A1001			n/a	X		X	X	X	X		1 lb (.46 kg)	8 weeks
006265-007	U9500A1004						X	X	X	X		1 lb (.46 kg)	8 weeks
006265-901	U9500A1001-R								X		X	1 lb (.46 kg)	8 weeks
006265-907	U9500A1004-R								X		X	1 lb (.46 kg)	8 weeks
006264-013	n/a	X	2 (L)	3/4 in	n/a	AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-014		X	2 (L)	20 mm/25 mm		AL		X				3.15 lb (1.43 kg)	8 weeks
006264-017		X	2 (L)	3/4 in		SS	X	X				9.5 lb (4.3 kg)	8 weeks
006264-018		X	2 (L)	20 mm		SS			X			9.5 lb (4.3 kg)	8 weeks
006264-027		X	2 (L)	20 mm/25 mm		AL				X		3.15 lb (1.43 kg)	8 weeks
006264-029		X	5	3/4 in		AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-025		X	3	3/4 in		AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-031		X	3	20 mm		AL			X			3.15 lb (1.43 kg)	8 weeks
006264-032		X	5	20 mm		AL			X			3.15 lb (1.43 kg)	8 weeks
006264-033		X	3	3/4 in Push Button^		AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-034		X	5	3/4 in Push Button^		AL	X	X				3.15 lb (1.43 kg)	8 weeks
006264-035		X	3	3/4 in Push Button^		SS	X	X				9.5 lb (4.3 kg)	8 weeks
006264-036		X	5	3/4 in Push Button^		SS	X	X				9.5 lb (4.3 kg)	8 weeks
006264-037		X	2 (L)	3/4 in		AL	X	X	X			9.5 lb (4.3 kg)	8 weeks
006264-038		X	3	3/4 in		AL	X	X	X			9.5 lb (4.3 kg)	8 weeks
006264-914		X	2 (L)	20 mm/25 mm		AL					X	9.5 lb (4.3 kg)	8 weeks

* "L" designates 90 degree conduit entry orientation
** If two numbers are listed, the first number is for detector entry and the second number is for field cabling
^ Explosion-proof pushbutton occupies one of the available conduit entries.

Infiniti® Parts

Part Number	Description	Use With	Ship Weight	Delivery
006809-001	Wire retaining clip	All	8 oz (0.23 kg)	4 weeks
102740-002	Calibration magnet	Infiniti, DCU, PointWatch	8 oz (0.23 kg)	4 weeks
102868-001	Junction box thread grease	All junction boxes	8 oz (0.23 kg)	4 weeks

R8471A Single Channel Rack-Mounted Combustible Gas Controller

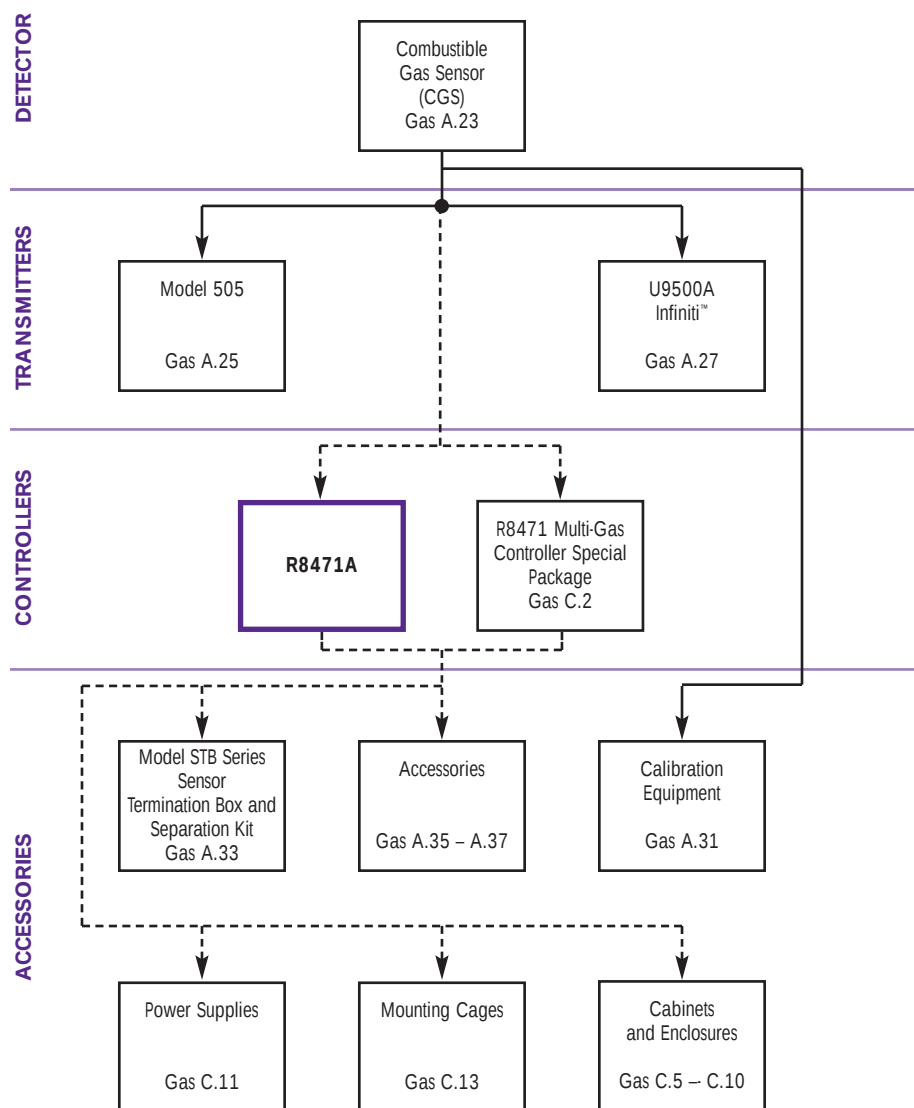


R8471A

R8471A Single Channel Rack-Mounted Combustible Gas Controller (Spec Sheet: 90-1045) is used with one Model 505, Infiniti or other transmitter/sensor combination. Features include:

- Digital and bar graph displays
- Individual low, high auxiliary, and fault alarm LEDs
- Standard open collector outputs
- Premium model offers 4-20 mA output and relay package
- Offered factory-installed in Q2050 Enclosure; see page L.2
- Panel Mount Controllers are available; see page L.6

NOTE: Refer to page L.2 for R8471 Multi-Gas Controller Special Package.



KEY: — = Required - - - = Option —●— = Choice Required

R8471A Single Channel Rack Mounted Combustible Gas Controller

Part Number	OS Number	Base Model: O.C. Output	Premium Model: 4-20 mA Output & Relays	LFL Range	Ht Config	Ht	FM	CSA	RUS	Ship Weight	Delivery
005479-001	R8471A1002	X		0 - 100%	4U	7.0 in	X	X		4 lb (1.9 kg)	4 weeks
005479-002	R8471A1004		X	0 - 100%	4U	7.0 in	X	X		4 lb (1.9kg)	4 weeks
005478-001	R8471A1001	X		0 - 100%	3U	5.25 in	X	X		3 lb (1.35 kg)	8 weeks
005478-002	R8471A1003		X	0 - 100%	3U	5.25 in	X	X		3 lb (1.35 kg)	8 weeks
005479-902	R8471A1004-R	X	X	0 - 100%	4U	7.0 in	X		X	4 lb (1.9kg)	8 weeks
005499-001	4U terminal Backplate									1 lb (0.4 kg)	4 weeks

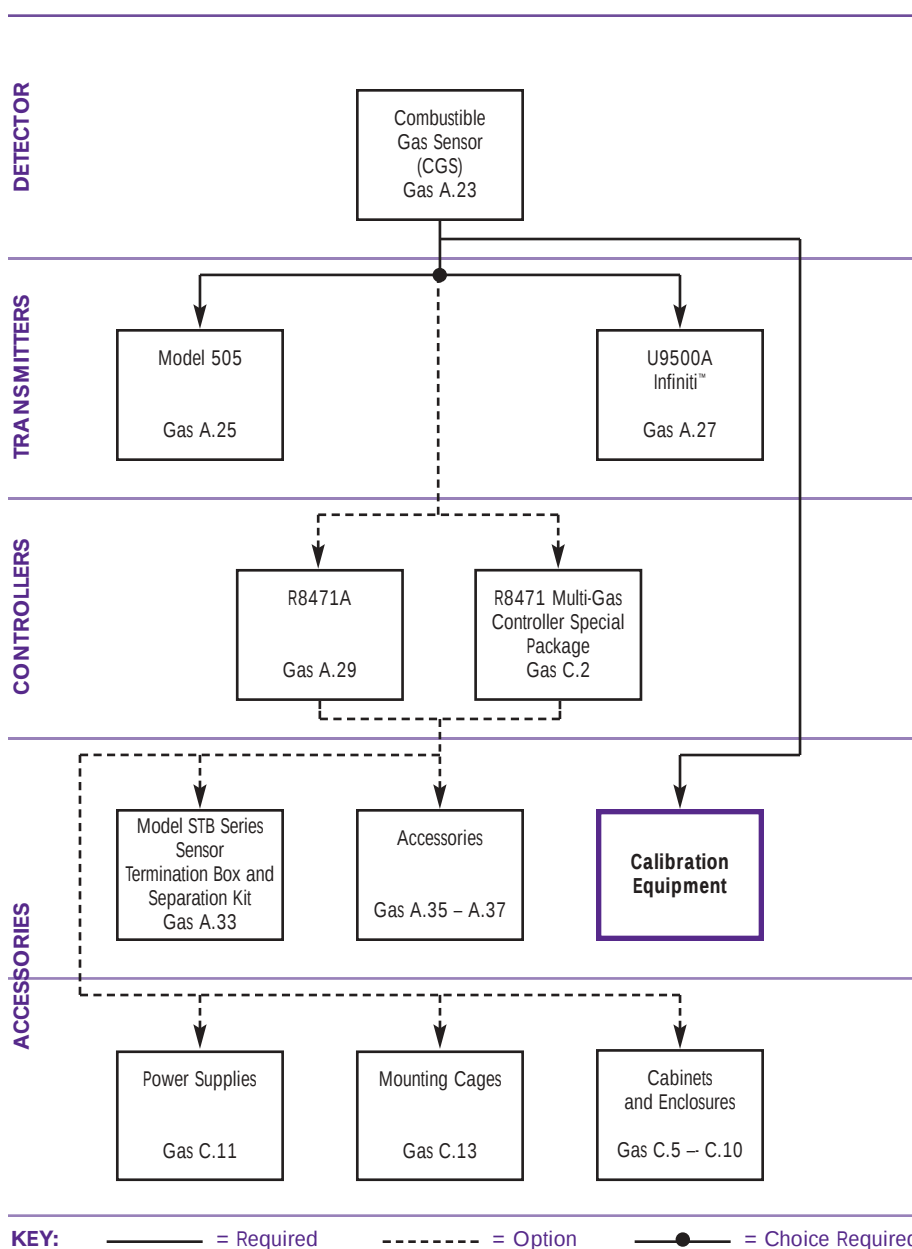
Combustible Gas Calibration Kits



Combustible Gas
Calibration Kits

Combustible Gas Calibration Kits (Spec Sheet: 90-1059) for combustible gas sensors. A sturdy carrying case containing:

- Two 3.6 cubic ft (103 liters) cylinders of specified gas
- A regulator and pressure indicator, 3-foot tube and calibration cup



Combustible Gas Calibration Kits

Calibration Kits for Catalytic Sensor

Part Number	LFL	Gas	% Vol	Ship Weight	Delivery
225130-001	50%	Methane	2.5	11.5 lb (5.23 kg)	4 weeks
225130-002	50%	Ethane	1.5	11.5 lb (5.23 kg)	4 weeks
225130-003	50%	Ethylene	1.35	11.5 lb (5.23 kg)	4 weeks
225130-004	50%	Propane	1.1	11.5 lb (5.23 kg)	4 weeks
225130-005	50%	Hydrogen	2.0	11.5 lb (5.23 kg)	4 weeks
225130-006	20%	Methane	1.0	11.5 lb (5.23 kg)	8 weeks
225130-007	25%	Methane	1.25	11.5 lb (5.23 kg)	8 weeks
225130-008	35%	Methane	1.75	11.5 lb (5.23 kg)	8 weeks
225130-009		none		10 lb (4.6 kg)	8 weeks

Calibration Kit Replacement Cylinders for all Combustibles

Part Number	Gas	LFL	% Vol	Ship Weight	Delivery
226166-001	Methane	50%	2.5	1.5 lb (0.7 kg)	4 weeks
226166-002	Ethane	50%	1.5	1.5 lb (0.7 kg)	4 weeks
226166-003	Ethylene	50%	1.35	1.5 lb (0.7 kg)	4 weeks
226166-004	Propane	50%	1.1	1.5 lb (0.7 kg)	4 weeks
226166-005	Hydrogen	50%	2.0	1.5 lb (0.7 kg)	4 weeks
226166-006	Air		20.9 Oxygen	1.5 lb (0.7 kg)	4 weeks
226166-007	Methane	20%	1.0	1.5 lb (0.7 kg)	8 weeks
226166-008	Methane	25%	1.25	1.5 lb (0.7 kg)	8 weeks
226166-009	Methane	35%	1.75	1.5 lb (0.7 kg)	8 weeks
226166-010	Propylene	50%	1.0	1.5 lb (0.7 kg)	4 weeks

Calibration Kit Replacement Parts

Part Number	Description	Ship Weight	Delivery
162552-001	Regulator, 1 LPM	8 oz (0.23 kg)	8 weeks
006672-001	Calibration windshield bag	8 oz (0.23 kg)	8 weeks
162553-001	Carrying Case	8 oz (0.23 kg)	8 weeks
101678-007	3 Foot tubing	8 oz (0.23 kg)	4 weeks
004976-001	Standard calibration cup, SS (1)	8 oz (0.23 kg)	4 weeks
225333-001	Cal screwdriver for remote cal transmitt	8 oz (0.23 kg)	4 weeks

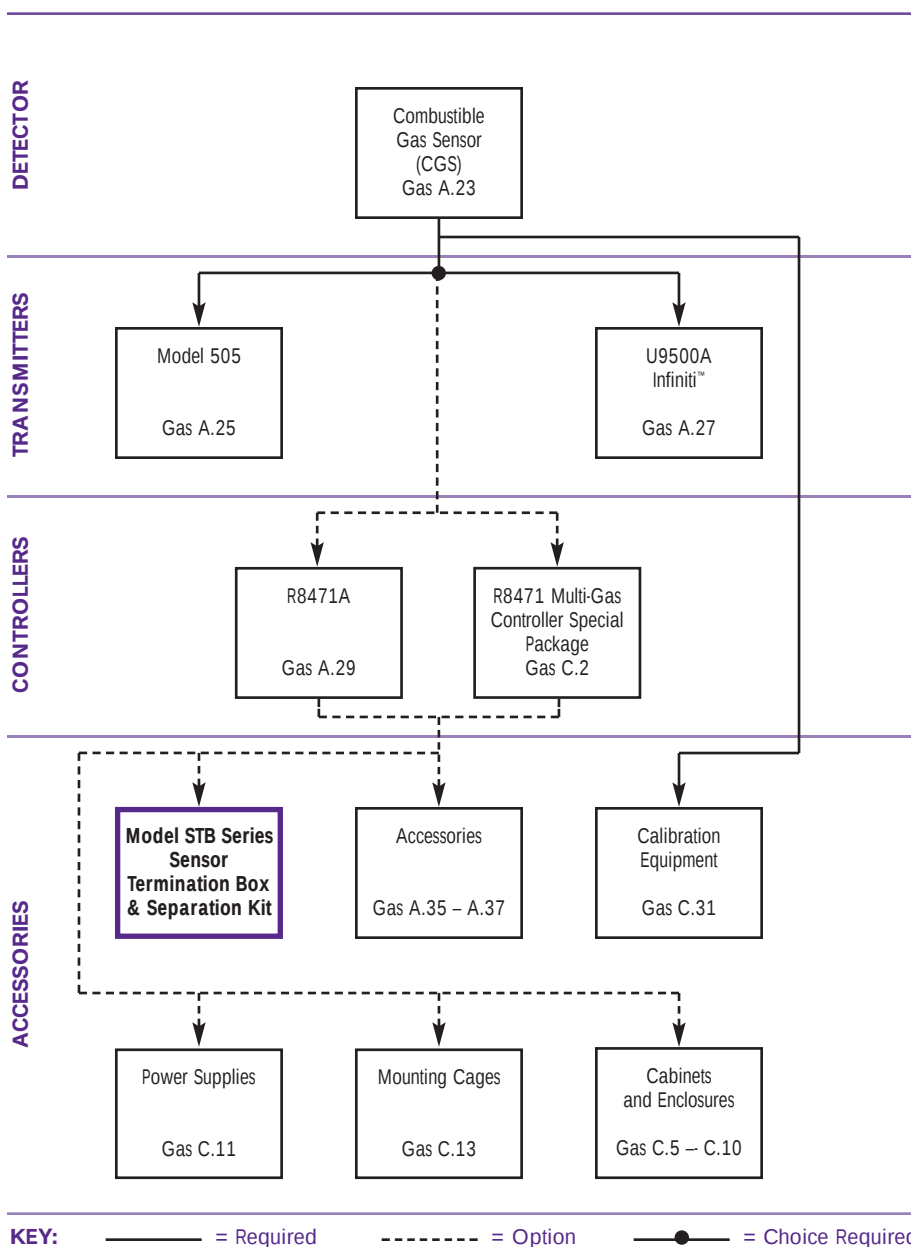
Model STB Series Sensor Termination Box and Separation Kit



Sensor Separation Kit

Model STB Series Sensor Termination Box and Separation Kit includes a junction box, proper connector board and all required hardware.

- Enables remote installation of sensor for optimum gas detection while offering easy calibration access to transmitter
- One sensor separation kit per sensor is required
- Optional remote calibration cups must be ordered separately; see page A.37
- Model 505 Transmitter Sensor separation wiring terminal block (part number 102883-001) is sold separately



Model STB Series Sensor Termination Box and Separation Kit

Model STB Series

Model STB Series Sensor Termination Boxes and Separation Kits

OS Number	Part Number	Use With	Threads**	Material	Ports*	Includes	FM	CSA	CEN	SAA	RUS	Ship Weight	Delivery
STB1A2MW	226365-119	Model 505	20 mm/25 mm	AL	2 - L	505 term. block, plug-in	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB1S2NA	226365-120	Model 505	3/4 in	SS	2 - L	505 term. block, plug-in	X	X				2.2 lb (1.0 kg)	8 weeks
STB1S2XW	226365-121	Model 505	20 mm	SS	2 - L	505 term. block, plug-in	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB1A2SW	226365-122	Model 505	3/4 in	AL	2 - ST	505 term. block, plug-in	X	X				2.2 lb (1.0 kg)	4 weeks
STB1A2SW	226365-123	Model 505	20 mm	AL	2 - ST	505 term. block, plug-in	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB1S2UW	226365-124	Model 505	3/4 in	SS	2 - ST	505 term. block, plug-in	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB1S2SA	226365-125	Model 505	20 mm	SS	2 - ST	505 term. block, plug-in	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB1A2NA	226365-131	Model 505	3/4 in	AL	2 - L	505 term. block, plug-in	X	X				2.2 lb (1.0 kg)	4 weeks
STB2A2MW	226365-127	U9500A catalytic	20 mm/25 mm	AL	2 - L	sensor wiring harness	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB2S2NA	226365-129	U9500A catalytic	3/4 in	SS	2 - L	sensor wiring harness	X	X				2.2 lb (1.0 kg)	4 weeks
STB2A2MW	226365-132	U9500A catalytic	3/4 in	AL	2 - L	sensor wiring harness	X	X	X			2.2 lb (1.0 kg)	4 weeks
STB2S2NW	226365-135	U9500A catalytic	20 mm/25 mm	SS	2 - L	sensor wiring harness	X	X	X				
STB2A2MR	226365-927	U9500A catalytic	20mm/25 mm	AL	2 - L	sensor wiring harness					X	2.2 lb (1.0 kg)	8 weeks
STB3A2MC	226365-111	C706x electrochem	20 mm/25 mm	AL	2 - L	Required hardware		X	X			2.2 lb (1.0 kg)	4 weeks
STB3A2NW	226365-133	C706x electrochem	3/4 in	AL	2 - L	Required hardware	X	X				2.2 lb (1.0 kg)	8 weeks
STB3A2MR	226365-911	C706x electrochem	20 mm/25 mm	AL	2 - L	Required hardware					X	2.2 lb (1.0 kg)	8 weeks
STB4A2YW	226365-510	EQ12 Terminal	25 mm	AL	2-L	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB5A3YW	226365-511	EQ12 Terminal	25 mm	AL	3 - T	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB5A5YW	226365-512	EQ12 Terminal	25 mm	AL	6-PT	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB5A6YW	226365-513	EQ12 Terminal	25 mm	AL	6-PT	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB6A2NW	226365-520	EQ12 Terminal	3/4 in	AL	2-L	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB5A3NW	226365-521	EQ12 Terminal	3/4 in	AL	3 - T	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB5A5NW	226365-522	EQ12 Terminal	3/4 in	AL	5-PT	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB5A6NW	226365-523	EQ12 Terminal	3/4 in	AL	6-PT	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB5S2YW	226365-530	EQ12 Terminal	M25	SS	2-L	Required hardware	X	X	X			3.0 lb (1.4 kg)	8 weeks
STB5S3YW	226365-531	EQ12 Terminal	M25	SS	3 - T	Required hardware	X	X	X			3.0 lb (1.4 kg)	8 weeks
STB5S5YW	226365-532	EQ12 Terminal	M25	SS	5-PT	Required hardware	X	X	X			3.0 lb (1.4 kg)	8 weeks
STB5S2NW	226365-540	EQ12 Terminal	3/4 in	SS	2-PT	Required hardware	X	X	X			3.0 lb (1.4 kg)	8 weeks
STB5S3NW	226365-541	EQ12 Terminal	3/4 in	SS	3 - T	Required hardware	X	X	X			3.0 lb (1.4 kg)	8 weeks
STB5S5NW	226365-542	EQ12 Terminal	3/4 in	SS	5-PT	Required hardware	X	X	X			3.0 lb (1.4 kg)	8 weeks
STB4A3YR	226365-928	EQ10 Terminal	25 mm	AL	3-T	Required hardware					X	2.2 lb (1.0 kg)	8 weeks
STB6A2MK	226365-114	500, K Series	20 mm/25 mm	AL	2 - L	K/500 Shorting Plug				X		2.2 lb (1.0 kg)	8 weeks
STB6S2NA	226365-116	500, K Series	3/4 in	SS	2 - L	K/500 Shorting Plug	X	X				2.2 lb (1.0 kg)	8 weeks
STB6S2XW	226365-117	500, K Series	20 mm	SS	2 - L	K/500 Shorting Plug	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB6A2MW	226365-126	500, K Series	20 mm/25 mm	AL	2 - L	K/500 Shorting Plug	X	X	X			2.2 lb (1.0 kg)	8 weeks
STB6A2UA	226365-128	500, K Series	3/4 in	AL	ST	K/500 Shorting Plug	X	X				2.2 lb (1.0 kg)	4 weeks
STB6A2NW	226365-130	500, K Series	3/4 in	AL	2 - L	K/500 Shorting Plug	X	X				2.2 lb (1.0 kg)	4 weeks
STB6S2XR	226365-917	500, K Series	20 mm	SS	2 - L	K/500 Shorting Plug			X			2.2 lb (1.0 kg)	8 weeks
STB6A2MR	226365-926	500, K Series	20 mm/25 mm	AL	2 - L	Required hardware					X	2.2 lb (1.0 kg)	8 weeks

* "L" designates 90 degree conduit entry orientation. "ST" designates straight-thru orientation. "T" designates 3-port orientation

** If two numbers are listed, the first number is for detector entry and the second number is for field cabling

Accessories: Rain Shields, Splash Guards, Dust Covers, Duct Mount Assembly



Rain Shields



Splash Guards

NOTE: Only one accessory recommended per catalytic sensor.

Rain Shields (Spec Sheet: 90-1046) protect combustible sensors from rain and snow.

Splash Guards (Spec Sheet: 90-1046) protect combustible sensors from ingress due to rain or splashing water.

Dust Covers (Spec Sheet: 90-1046) protect sensors against dust, oil, and high wind environments. Porex and stainless steel filters available.

Duct Mount Assembly (Spec Sheet: 90-1046). For mounting combustible sensors to air handling duct work.

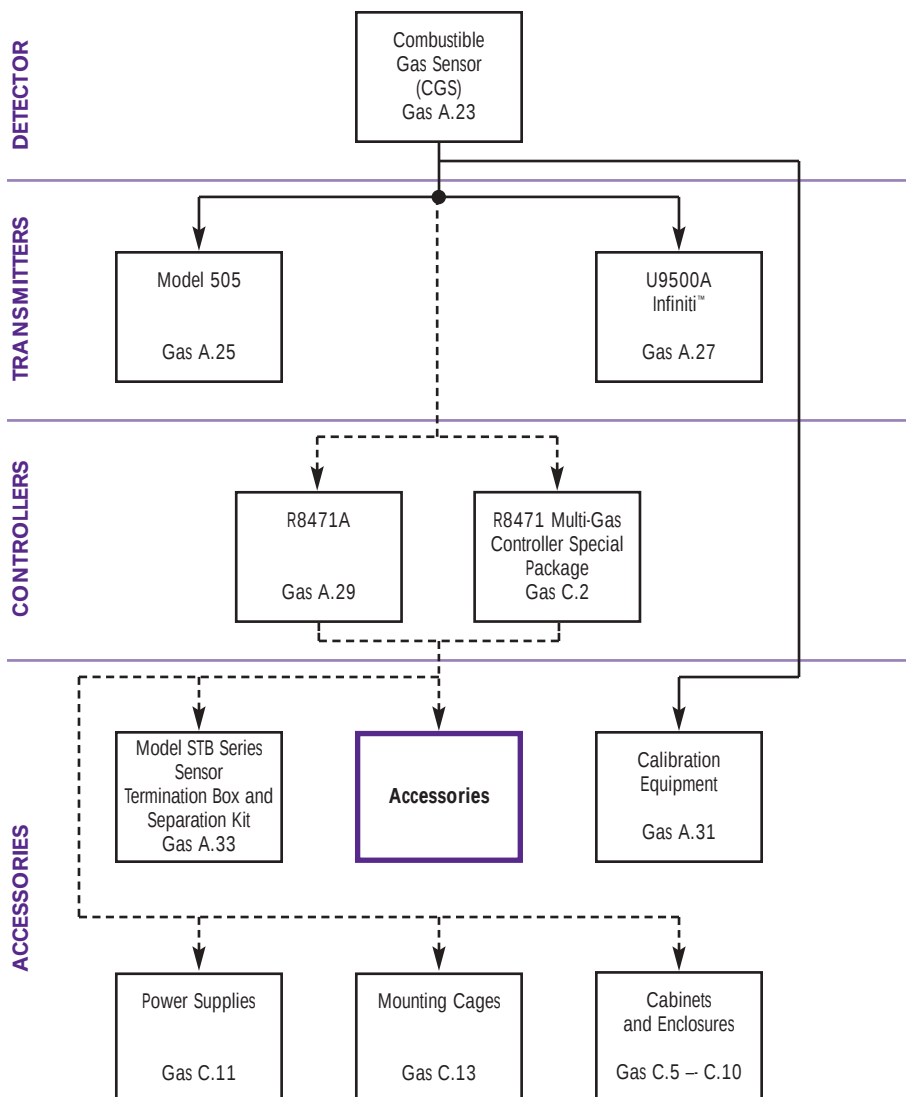
- Enables monitoring of combustible gases within air handling systems, while maintaining easy sensor access
- Designed for mounting to a flat surface
- Sealing gaskets provided on mounting flange and interior shoulder to keep duct air seal



Dust Covers



Duct Mount Assembly



KEY: — = Required - - - - - = Option ● = Choice Required

Accessories: Rain Shields, Splash Guards, Dust Covers, Duct Mount Assembly

Rain Shields

Part Number	Material	Ship Weight	Delivery
226349-001	Al	6 oz (0.17 kg)	4 weeks
226349-002	SS	6 oz (0.17 kg)	4 weeks

Splash Guard

Part Number	Material	Ship Weight	Delivery
006491-001	AL	2 lb (.95 kg)	8 weeks

Dust Covers

Part Number	Material	Ship Weight	Delivery
225312-001	SS	2 oz (0.09 kg)	4 weeks
226190-001	Porex*	2 oz (0.09 kg)	4 weeks

* Porex is NOT suitable for temperatures above 75 degrees Celsius

Duct Mount Assembly

Part Number	Material	Ship Weight	Delivery
226846-001	AL	6 oz (0.17 kg)	8 weeks
226846-008	SS	1 lb (0.46 kg)	8 weeks

Accessories: Remote Calibration Cups, Sample Draw Assembly, Model Q811



Remote Calibration Cups



Sample Draw Assembly



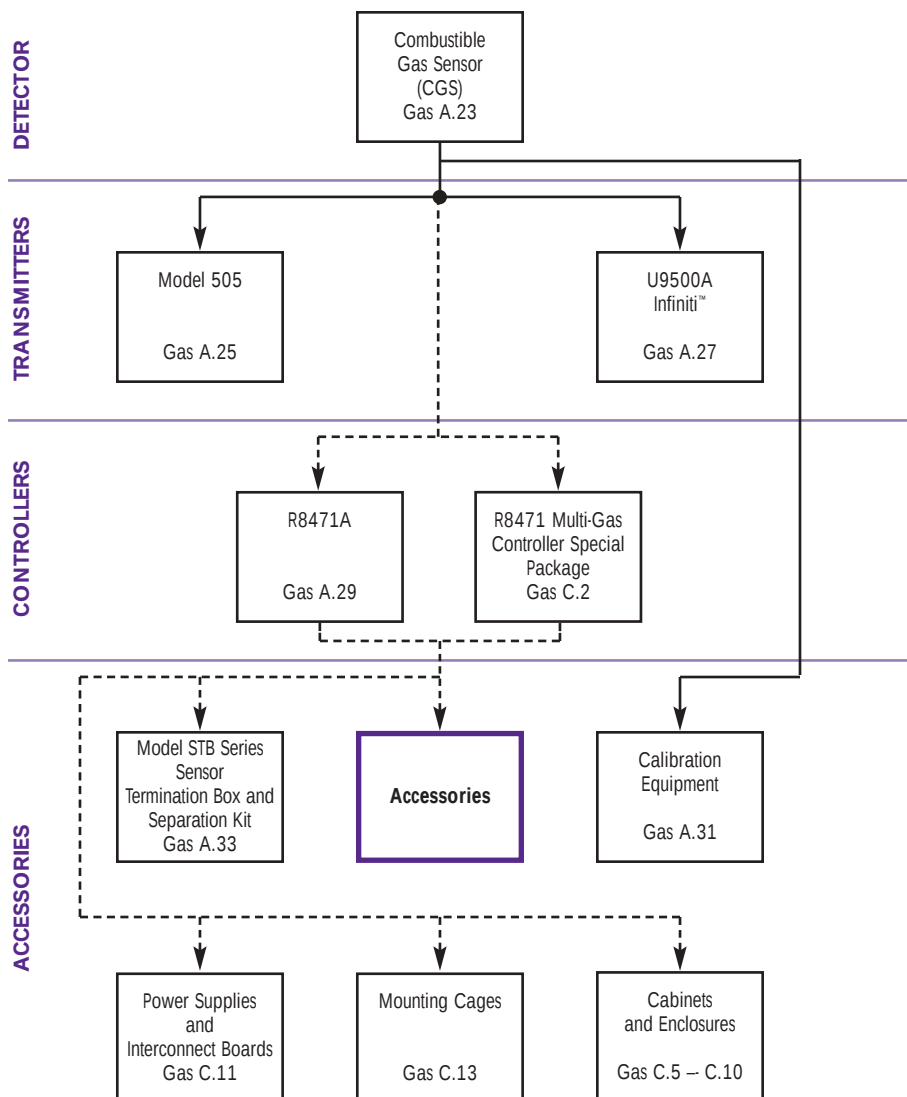
Model Q811
Duct Mount Enclosure

Remote Calibration Cups. Useful in remotely calibrating the combustible gas sensors, which are separate from their transmitters. Allows for open area gas detection.

Sample Draw Assembly (Spec Sheet: 90-1046) provides a sealed sample enclosure enabling the catalytic gas sensor to function within a gas sample extraction system. Customer provides clean compressed air to "T" fitting in order to activate the sample draw vacuum. Two "T" fittings are required for low oxygen applications.

Combustible Model Q811 Duct Mount Enclosure (Manual: 95-8459) is designed to provide combustible gas detection in air handling, heating, ventilating, and air conditioning ducts.

- Mounts to a flat duct wall surface
- A stainless steel sampling tube spans the duct's cross section as a 1 foot tube returns the sample
- Allows large volume, continuous air sampling
- Requires a 600 – 4000 fpm velocity
- Stainless steel NEMA 4X enclosure
- Includes catalytic bead sensor



KEY: — = Required - - - - - = Option ● = Choice Required

Accessories: Remote Calibration Cups, Sample Draw Assembly, Model Q811

Remote Calibration Cups

Part Number	Use	Filter Material	Fitting	Ship Weight	Delivery
225777-001	Outdoor	Porex	Barbed	.5 lb (0.14 kg)	4 weeks
004996-001	Outdoor	Porex	Compression	.5 lb (0.14 kg)	4 weeks
006618-001	Indoor	SS Screen	Barbed	.5 lb (0.14 kg)	4 weeks
006618-002	Indoor	SS Screen	Compression	.5 lb (0.14 kg)	4 weeks

Sample Draw Assemblies/Others

Part Number	"T" fittings	Material	Ship Weight	Delivery
225775-001	1	AL	6 oz (0.17 kg)	8 weeks
225775-002	2	AL	6 oz (0.17 kg)	8 weeks
225775-003	1	SS	1 lb (0.46 kg)	8 weeks
225775-004	2	SS	1 lb (0.46 kg)	8 weeks

NOTE: These assemblies require additional hardware to provide proper performance.

Model Q811 Combustible Duct Mount Enclosures

Part Number	Material	Length	FM	CSA	SAA	Ship Weight	Delivery
000811-001**	SS	*	X	X	X	10 lb (4.5 kg)	12 weeks

* Customer to specify required inlet tube length at time of order entry (1 inlet and 1 return tube included at no extra cost).

** Includes catalytic sensor, no transmitter.

Model Q811 Combustible Duct Mount Enclosures Spare Tubes

Part Number	Material	Length	Ship Weight	Delivery
000214-126	304 SS	1 ft	8 oz (0.23 kg)	12 weeks
000214-127	304 SS	3 ft	8 oz (0.23 kg)	12 weeks
000214-128	304 SS	6 ft	8 oz (0.23 kg)	12 weeks
000214-129	304 SS	10 ft	8 oz (0.23 kg)	12 weeks
000214-130	304 SS	1 ft return	8 oz (0.23 kg)	12 weeks

Miscellaneous Parts

Part Number	Description	Use With	Ship Weight	Delivery
226367-001	Transmitter extender plug	K/500	8 oz (0.23 kg)	4 Weeks
226758-001	Cal meter extension cable	K	8 oz (0.23 kg)	8 Weeks
226462-001	Shorting plug sep kits	K	8 oz (0.23 kg)	4 Weeks
226757-001	Connector bd for sep kit J-box	K/500	8 oz (0.23 kg)	4 Weeks
107427-037	O ring for remote cal cup		8 oz (0.23 kg)	4 Weeks
006470-001	Wiring harness for Infiniti sensor sep kit	Infiniti	8 oz (0.23 kg)	8 Weeks
005418-003	Connector bd for separation kit	Infiniti, U8700	8 oz (0.23 kg)	8 weeks

Model DEC-THZ Hart Gas Transmitter

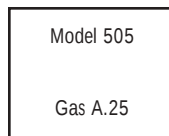


Model DEC-THZ Hart Gas Transmitter is a Class 1, Division 1 approved transmitter compatible with the Model 505 combustible and other Det-Tronics gas sensors. Provides a linear 4 to 20 mA output proportional to incoming 4 to 20 ma signal input and large digital display of detected gas level. Intended for direct interface with HART or non-HART based analog input systems. Easily programmed or calibrated anywhere on the 4 to 20 mA loop using a hand-held HART communicator such as the Model 275 or a HART-based control or management system (AMS). Other features include:

- Continuous sensor diagnostics with HART messaging
- Modular, sealed enclosure with dual-compartment design
- LED display includes numeric value, bar graph and HART address
- Easy sensor calibration using HART Communicator
- Junction box accepts all Det-Tronics C706X line of toxic gas detectors

Model DEC-THZ

DETECTOR



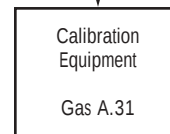
TRANSMITTER



CONTROLLERS



ACCESSORIES



KEY: — = Required - - - - - = Option —●— = Choice Required

Model DEC-THZ Hart Toxic Gas Transmitter

DEC-THZ HART Gas Detectors

Part Number	Gas sensor installed (w/sensor cell)	J-box material	Conduit Entries	Ship Weight	Delivery
000850-001	C7064E H2S	aluminum	2 (ST)	10 lb (kg)	8 weeks
000850-010	C7065E O2	aluminum	2 (ST)	10 lb (kg)	8 weeks
000850-020	C7066E CO	aluminum	2 (ST)	10 lb (kg)	8 weeks
000850-030	C7068E SO2	aluminum	2 (ST)	10 lb (kg)	8 weeks
000850-040	CGS/505*	aluminum	2 (ST)	10 lb (kg)	8 weeks

* CGS/505 catalytic combustible gas detector THZ version utilizes two close-coupled j-boxes

Model DEC-THZ

C706X Toxic Gas Sensor/Transmitter



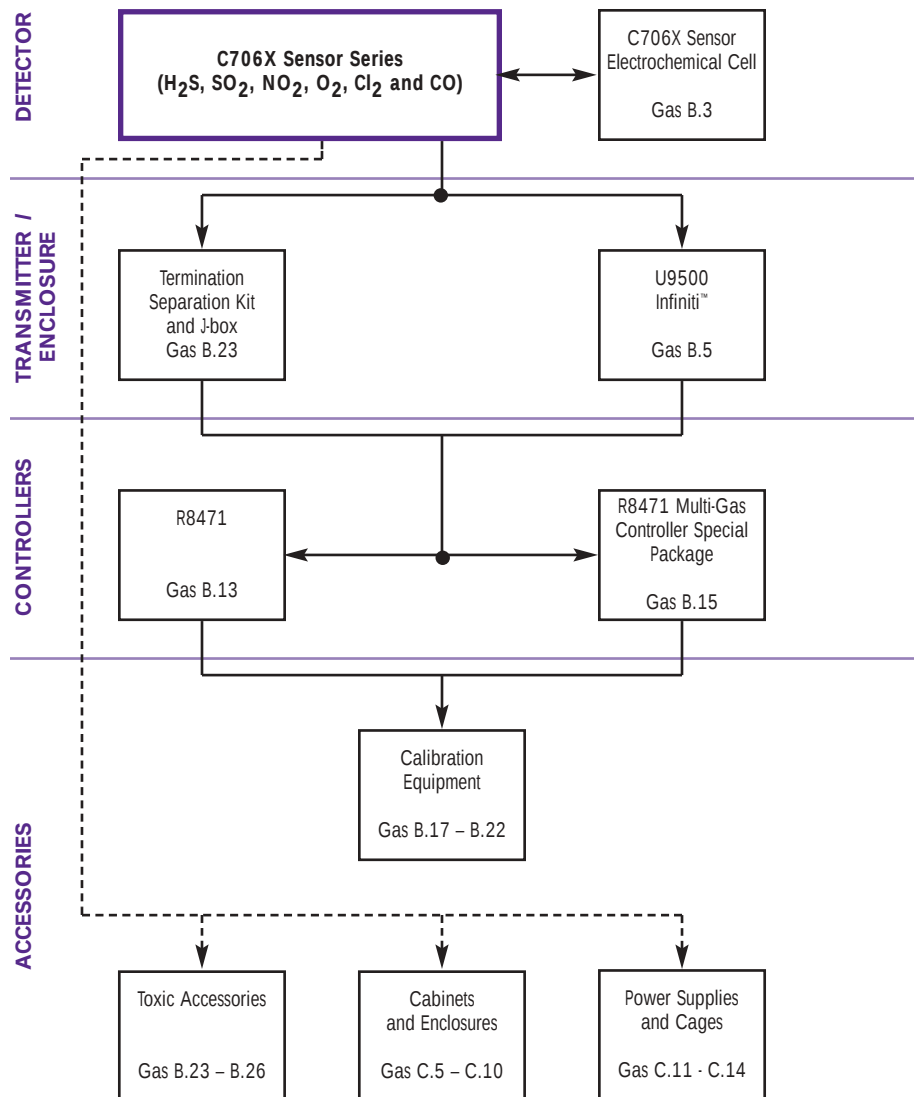
C706X



C706X

C706X Sensor/Transmitter (Spec Sheet: 90-1079) housing. Two-wire, stainless steel or aluminum toxic gas detector with 3/4" NPT or 20 mm threads. Purchase EC cell separately for monitoring H₂S, O₂, NO₂, Cl₂, CO and SO₂ toxic gases. Use with U9500X series Infiniti transmitter or R8471X toxic controller.

- 4-20 mA output is proportional to EC cell measurement range
- Electrochemical cell sold separately; see K.5
- Two year warranty (except for C7065E and C7067E which have a one year warranty)
- Optional measurement ranges available for H₂S and CO versions.
- Optional portable sensor calibrator available for standalone sensor applications.



KEY: — = Required - - - - - = Option • = Choice Required

C706X Explosion-Proof Sensor Housings Only

Part Number	OS Number	Toxic Gas	Threads	Encl Material	Measurement Range	FM	CSA	Other	Ship Weight	Delivery
004539-004	C7064C4012*	Hydrogen Sulfide	3/4 in	SS	All		X	IS	2.5 lb (1.28 kg)	8 weeks
004539-007	C7064C5012*	Hydrogen Sulfide	20 mm	SS	All			BASEEFA, IS	2.5 lb (1.28 kg)	8 weeks
004539-009	C7064E4012	Hydrogen Sulfide	3/4 in	SS	All	X	X	Groups C, D	2.5 lb (1.28 kg)	4 weeks
004539-014	C7064C5014*	Hydrogen Sulfide	20 mm	SS	All			SAA, IS	2.5 lb (1.28 kg)	8 weeks
004539-102	C7064E5012	Hydrogen Sulfide	20 mm	SS	All	X	X		2.5 lb (1.28 kg)	4 weeks
004539-103	C7064E6031	Hydrogen Sulfide	20 mm	SS	All			SIRA	2.5 lb (1.28 kg)	4 weeks
004539-104	C7064E6012	Hydrogen Sulfide	3/4 in	SS	All			CEPEL	2.5 lb (1.28 kg)	4 weeks
004539-105	C7064E5014	Hydrogen Sulfide	3/4 in	SS	All		X	Groups B, C, D	2.5 lb (1.28 kg)	4 weeks
005931-001	C7067E7012*	Chlorine	3/4 in	AL	All		X	IS	2.5 lb (1.28 kg)	8 weeks
005931-002	C7067E7031*	Chlorine	20 mm	AL	All		X	IS	2.5 lb (1.28 kg)	8 weeks
005736-001	C7066E6012	Carbon Monoxide	3/4 in	AL	0-100 ppm		X		2.5 lb (1.28 kg)	8 weeks
005736-002	C7066E6031	Carbon Monoxide	20 mm	AL	0-100 ppm		X		2.5 lb (1.28 kg)	8 weeks
005736-003	C7066E7012	Carbon Monoxide	3/4 in	AL	0-500 ppm		X		2.5 lb (1.28 kg)	8 weeks
005736-004	C7066E7031	Carbon Monoxide	20 mm	AL	0-500 ppm		X		2.5 lb (1.28 kg)	8 weeks
005736-005	C7066E8012	Carbon Monoxide	3/4 in	AL	0-1000 ppm		X		2.5 lb (1.28 kg)	8 weeks
005736-006	C7066E8031	Carbon Monoxide	20 mm	AL	0-1000ppm		X		2.5 lb (1.28 kg)	8 weeks
006398-001	C7068E8012	Sulfur Dioxide	3/4 in	SS	All		X		2.5 lb (1.28 kg)	8 weeks
006398-002	C7068E8031	Sulfur Dioxide	20 mm	SS	All				2.5 lb (1.28 kg)	8 weeks
006394-001	C7069E9012	Nitrogen Dioxide	3/4 in	SS	All		X		2.5 lb (1.28 kg)	8 weeks
006394-002	C7069E9031	Nitrogen Dioxide	20 mm	SS	All				2.5 lb (1.28 kg)	8 weeks
005723-001	C7065E5012	Oxygen	3/4 in	AL	All		X		2.5 lb (1.28 kg)	8 weeks
005723-002	C7065E5031	Oxygen	20 mm	AL	All		X		2.5 lb (1.28 kg)	8 weeks
004539-903	C7064E6031-R	Hydrogen Sulfide	20 mm	SS	All			RUSS	2.5 lb (1.28 kg)	4 weeks

* These gas detectors are intrinsically-safe only when used with listed transmitter and/or i.s. barrier.

Sensor Replacements

Part Number	Description	Use With	Delivery
004532-002	Hydrophobic filter	All electrochemical sensors except Ci2	4 weeks
226757-002	Connector bd (no J-box)	All	4 weeks
006728-001	Nose piece	All stainless steel electrochemical sensor housings.	4 weeks

Electrochemical Cells

Reliable electrochemical sensor cells are required for proper operation of all C706X gas detectors. Proper sensor cell must be used with matching C706X housing. Cells are packaged separately from housing in a sealed storage bag and should be stored in a cool, dry place until installation/commissioning is required.

NOTE: 0-100 ppm typical range. Carbon monoxide offers three ranges – be sure to use proper cell with matching housing!



5724-001



005932-001



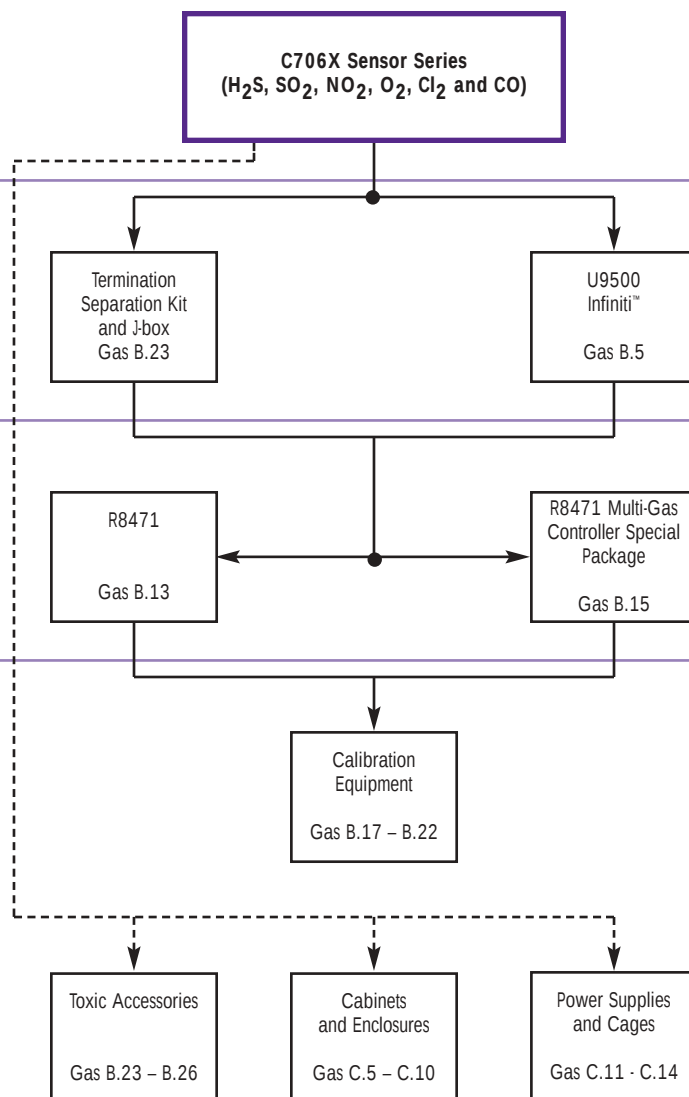
005434-002, 006395-001,
006400-001

DETECTOR

TRANSMITTER /
ENCLOSURE

CONTROLLERS

ACCESSORIES



KEY: — = Required - - - - - = Option —●— = Choice Required

Toxic and Oxygen Gas B.3

Electrochemical Cells

Electrochemical Cells

Electrochemical Cell

Part Number	OS Number	Toxic Gas	ppm Range	FM	CSA	CEN	Other	Ship Weight	Delivery
005434-003	DE5434-003	Hydrogen Sulfide	0 - 20	X	X	X		2 oz (.09 kg)	4 weeks
005434-004	DE5434-004	Hydrogen Sulfide	0 - 50	X	X	X	SAA	2 oz (.09 kg)	4 weeks
005434-002	DE5434-002	Hydrogen Sulfide	0 -100	X	X	X	SAA	2 oz (.09 kg)	4 weeks
005932-001		Chlorine	0 -10					2 oz (.09 kg)	8 weeks
005744-001		Carbon Monoxide	0 - 100					2 oz (.09 kg)	8 weeks
005744-002		Carbon Monoxide	0 - 500					2 oz (.09 kg)	8 weeks
005744-003		Carbon Monoxide	0 - 1000					2 oz (.09 kg)	8 weeks
006400-001		Sulfur Dioxide	0 - 100					2 oz (.09 kg)	8 weeks
006395-001		Nitrogen Dioxide	0 - 20					2 oz (.09 kg)	8 weeks
005724-001		Oxygen	0 - 25%					2 oz (.09 kg)	8 weeks

* The 005434-003/004 Hydrogen Sulfide Electrochemical cells are recommended for use with the U9500 Infiniti Transmitter only.

U9500 Infiniti® Transmitter and Junction Boxes



U9500 Infiniti®

U9500 Infiniti® Transmitter and Junction Boxes (Spec Sheet: 90-1099) for use with the C706X family of electrochemical sensors.

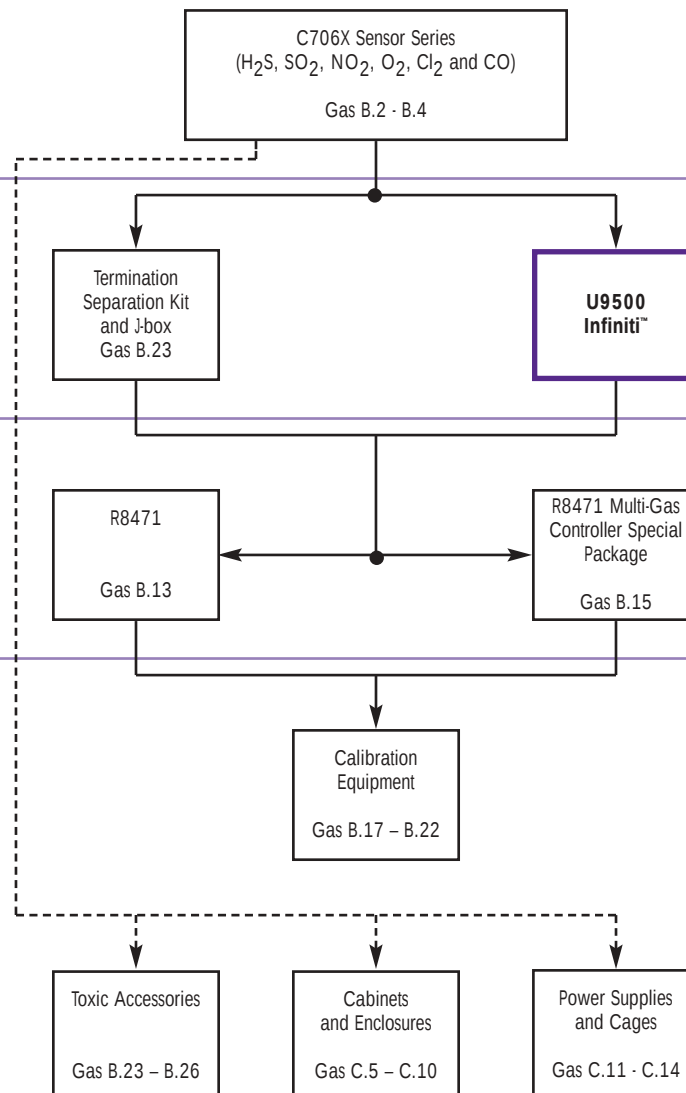
- Linear isolated 4-20 mA output with eight character LCD display
- Non-intrusive automatic calibration
- Base version provides analog output only
- Optional relay package (three alarm, one fault)
- Sensor separation capability
- Selectable range for carbon monoxide detection
- Junction box ordered separately
- Optional reset/calibration pushbutton is preinstalled on some junction boxes (recommended where magnets are not preferred)

DETECTOR

TRANSMITTER /
ENCLOSURE

CONTROLLERS

ACCESSORIES



KEY: — = Required - - - - - = Option ● = Choice Required

Toxic and Oxygen Gas B.5

U9500 Infiniti®

U9500 Infiniti® Transmitter and Junction Boxes

U9500 Infiniti®

U9500 Infiniti® Toxic Transmitter & Junction Boxes (must be ordered separately)

Part Number	OS Number	Conduit Entry**	Used with sensor type:	Relay	Material	Ports*	FM	CSA	CEN	SAA	RUS	Ship Weight	Delivery		
006265-002	U9500B2002	n/a	Hydrogen Sulfide-C7064E		n/a		X	X	X	X		1 lb (.46 kg)	8 weeks		
006265-008	U9500B2004		Hydrogen Sulfide-C7064E	X			X	X		1 lb (.46 kg)	8 weeks				
006265-902	U9500B2002-R		Hydrogen Sulfide-C7064E						X	1 lb (.46 kg)	8 weeks				
006265-908	U9500B2004-R		Hydrogen Sulfide-C7064E	X						1 lb (.46 kg)	8 weeks				
006265-004	U9500D4002		Chlorine							1 lb (.46 kg)	8 weeks				
006265-010	U9500D4004		Chlorine	X						1 lb (.46 kg)	8 weeks				
006265-005	U9500E5002		Carbon Monoxide						X	X	1 lb (.46 kg)	8 weeks			
006265-011	U9500E5004		Carbon Monoxide	X					X	X	1 lb (.46 kg)	8 weeks			
006265-015	U9500F6002		Sulfur Dioxide								1 lb (.46 kg)	8 weeks			
006265-016	U9500F6004		Sulfur Dioxide	X							1 lb (.46 kg)	8 weeks			
006265-013	U9500G6002		Nitrogen Dioxide								1 lb (.46 kg)	8 weeks			
006265-014	U9500G6004		Nitrogen Dioxide	X							1 lb (.46 kg)	8 weeks			
006265-006	U9500C3002		Oxygen							X	X	X	1 lb (.46 kg)	8 weeks	
006265-012	U9500C3004		Oxygen	X							X	X	X	1 lb (.46 kg)	8 weeks
J-boxes															
006264-013	n/a	3/4 in	H2S,Cl2,CO,SO2,NO2, O2	n/a	AL	2 (L)	X	X				3.15 lb (1.43 kg)	8 weeks		
006264-014		20 mm/25 mm	H2S,Cl2,CO,SO2,NO2, O2		AL	2 (L)	X	X				3.15 lb (1.43 kg)	8 weeks		
006264-017		3/4 in	H2S,Cl2,CO,SO2,NO2, O2		SS	2 (L)	X	X				9.5 lb (4.3 kg)	8 weeks		
006264-018		20 mm/25 mm	H2S,Cl2,CO,SO2,NO2, O2		SS	2 (L)	X	X				9.5 lb (4.3 kg)	8 weeks		
006264-027		20 mm/25 mm	Hydrogen Sulfide-C7064E		AL	2 (L)			X			3.15 lb (1.43 kg)	8 weeks		
006264-028		20 mm	Hydrogen Sulfide-C7064E		SS	2 (L)			X			9.5 lb (4.3 kg)	8 weeks		
006264-029		3/4 in	H2S,Cl2,CO,SO2,NO2, O2		AL	5	X	X				3.15 lb (1.43 kg)	8 weeks		
006264-025		3/4 in	Hydrogen Sulfide-C7064E		AL	3	X	X					3.15 lb (1.43 kg)	8 weeks	

* "L" designates 90 degree conduit entry orientation. "ST" designates straight-thru or 180 degree orientation.

** If two numbers are listed, the first number is for sensor entry and second number of for field cable entry(ies).

TXL Series Toxic Gas Detectors



TXL

The **TXL** family of loop-powered, electrochemical toxic gas detectors are low-cost, easy to install, and approved by UL for use in hazardous areas when used with an approved, intrinsically-safe zener barrier. All TXL detectors utilize a NEMA 4, coated aluminum enclosure, and provide an 8-character LCD gas level display with magnetic, non-intrusive calibration feature.

- 4-20 mA signal output (2-wire-loop-powered)
- UL approved Class I, Groups A, B, C and D; Class II, E, F, G and Class III areas when properly installed
- CE and DEMKO approvals
- China pattern approval
- Wide variety of gases detected
- TXL Calibration kit required

DETECTOR

TXL Series Toxic
Gas Detector

TRANSMITTER

CONTROLLERS

MegaSense Gas
Controller
Gas B.15

R8471 Multi-Gas
Controller Special
Package
Gas B.13

ACCESSORIES

TXL
Calibration Gas
Equipment
Gas
Gas B.19

KEY: — = Required - - - - - = Option ● = Choice Required

TXL Series Toxic Gas Detectors

TXL Series Toxic Gas Detectors (2-wire type)

Part Number	OS Number	Gas Type	Measurement Range	J-box material	Conduit Entries	Ship Weight	Delivery
000518-001	TXL -H2S	hydrogen sulfide	0-500 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-002	TXL -H2S1	hydrogen sulfide	0-50 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-003	TXL -NH3	ammonia	0-200 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-004	TXL -CO	carbon monoxide	0-999 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-005	TXL -NO2	nitrogen dioxide	0-50 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-006	TXL -PH3	phosphine	0-20 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-007	TXL -SO2	sulfur dioxide	0-20 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-008	TXL -HCN	hydrogen cyanide	0-50 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-009	TXL -CL2	chlorine	0-9.9 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-010	TXL -CLO2	chlorine dioxide	0-20 PPM	aluminum	1	1 lb (0.5 kg)	8 weeks
000518-011	TXL -O2	oxygen	0-40% by volume	aluminum	1	1 lb (0.5 kg)	8 weeks

TXL Series Spare Sensors

Part Number	Gas Type	Measurement Range	Ship Weight	Delivery
000518-101	hydrogen sulfide	0-500 PPM	1 lb (0.5 kg)	8 weeks
000518-102	hydrogen sulfide	0-50 PPM	1 lb (0.5 kg)	8 weeks
000518-103	ammonia	0-200 PPM	1 lb (0.5 kg)	8 weeks
000518-104	carbon monoxide	0-999 PPM	1 lb (0.5 kg)	8 weeks
000518-105	nitrogen dioxide	0-50 PPM	1 lb (0.5 kg)	8 weeks
000518-106	phosphine	0-20 PPM	1 lb (0.5 kg)	8 weeks
000518-107	sulfur dioxide	0-20 PPM	1 lb (0.5 kg)	8 weeks
TBA	hydrogen cyanide	0-50 PPM	1 lb (0.5 kg)	8 weeks
000518-109	chlorine	0-9.9 PPM	1 lb (0.5 kg)	8 weeks
000518-110	chlorine dioxide	0-20 PPM	1 lb (0.5 kg)	8 weeks
000518-111	oxygen	0-40% by volume	1 lb (0.5 kg)	8 weeks

TXL Series Calibration Gas Kits*

Part Number	Model Number	Gas Type	Cal gas Concentration	Ship Weight	Delivery
000518-209	TXL-Kit-CL2	Chlorine	PPM	1 lb (0.5 kg)	8 weeks
000518-204	TXL-Kit-CO	Monoxide	50 PPM	1 lb (0.5 kg)	8 weeks
000518-201	TXL-Kit-H2S	sulfide	25 PPM	1 lb (0.5 kg)	8 weeks
000518-208	TXL-Kit-HCN	cyanide	PPM	1 lb (0.5 kg)	8 weeks
000518-203	TXL-Kit-NH3	ammonia	25 PPM	1 lb (0.5 kg)	8 weeks
000518-205	TXL-Kit-NO2	dioxide	10 PPM	1 lb (0.5 kg)	8 weeks
000518-206	TXL-Kit-PH3	phosphine	5 PPM	1 lb (0.5 kg)	8 weeks
000518-207	TXL-Kit-SO2	sulfur dioxide	10 PPM	1 lb (0.5 kg)	8 weeks
000518-212	TXL-Kit-HCL	chloride	2 PPM	1 lb (0.5 kg)	8 weeks
000518-211	TXL-Kit-O2	oxygen	21% O2	1 lb (0.5 kg)	8 weeks

* only compatible with TXL-series gas detectors; not compatible with any other DEC gas detection products

Model DEC-THZ Hart Toxic Gas Transmitter



Model DEC-THZ Hart Toxic Gas Transmitter is a Class 1, Division 1 approved transmitter compatible with the entire line of Det-Tronics C706X electrochemical toxic gas detectors. Provides a linear 4 to 20 mA output proportional to incoming 4 to 20 ma signal input and large digital display of detected toxic gas level. Intended for direct interface with HART or non-HART based analog input systems. Easily programmed or calibrated anywhere on the 4 to 20 mA loop using a hand-held HART communicator such as the Model 275 or a HART-based control or management system (AMS). Other features include:

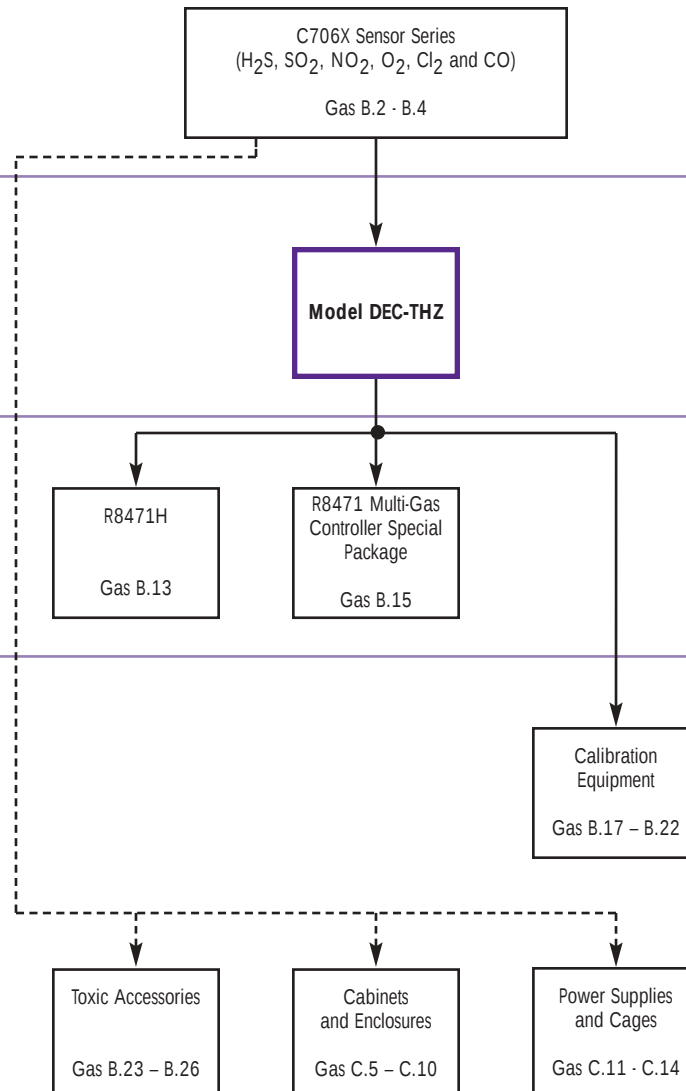
- Factory configured with toxic sensors — ready to install
- Continuous sensor diagnostics with HART messaging
- Modular, sealed enclosure with dual-compartment design
- LED display includes numeric value, bar graph and HART address
- Easy sensor calibration using HART Communicator
- Junction box provides 3/4" NPT openings

DETECTOR

TRANSMITTER

CONTROLLERS

ACCESSORIES



KEY: — = Required - - - - - = Option —●— = Choice Required

Model DEC-THZ

Model DEC-THZ Hart Toxic Gas Transmitter

DEC-THZ HART Gas Detectors

Part Number	Gas sensor installed (w/sensor cell)	J-box material	Conduit Entries	Ship Weight	Delivery
000850-001	C7064E H2S	aluminum	2 (ST)	10 lb (kg)	8 weeks
000850-010	C7065E O2	aluminum	2 (ST)	10 lb (kg)	8 weeks
000850-020	C7066E CO	aluminum	2 (ST)	10 lb (kg)	8 weeks
000850-030	C7068E SO2	aluminum	2 (ST)	10 lb (kg)	8 weeks
000850-040	CGS/505*	aluminum	2 (ST)	10 lb (kg)	8 weeks

* CGS/505 catalytic combustible gas detector THZ version utilizes two close-coupled j-boxes

Model DEC-THZ

Metal Oxide Semiconductor (MOS) Hydrogen Sulfide Detector



Metal Oxide Semiconductor
Hydrogen Sulfide Sensor

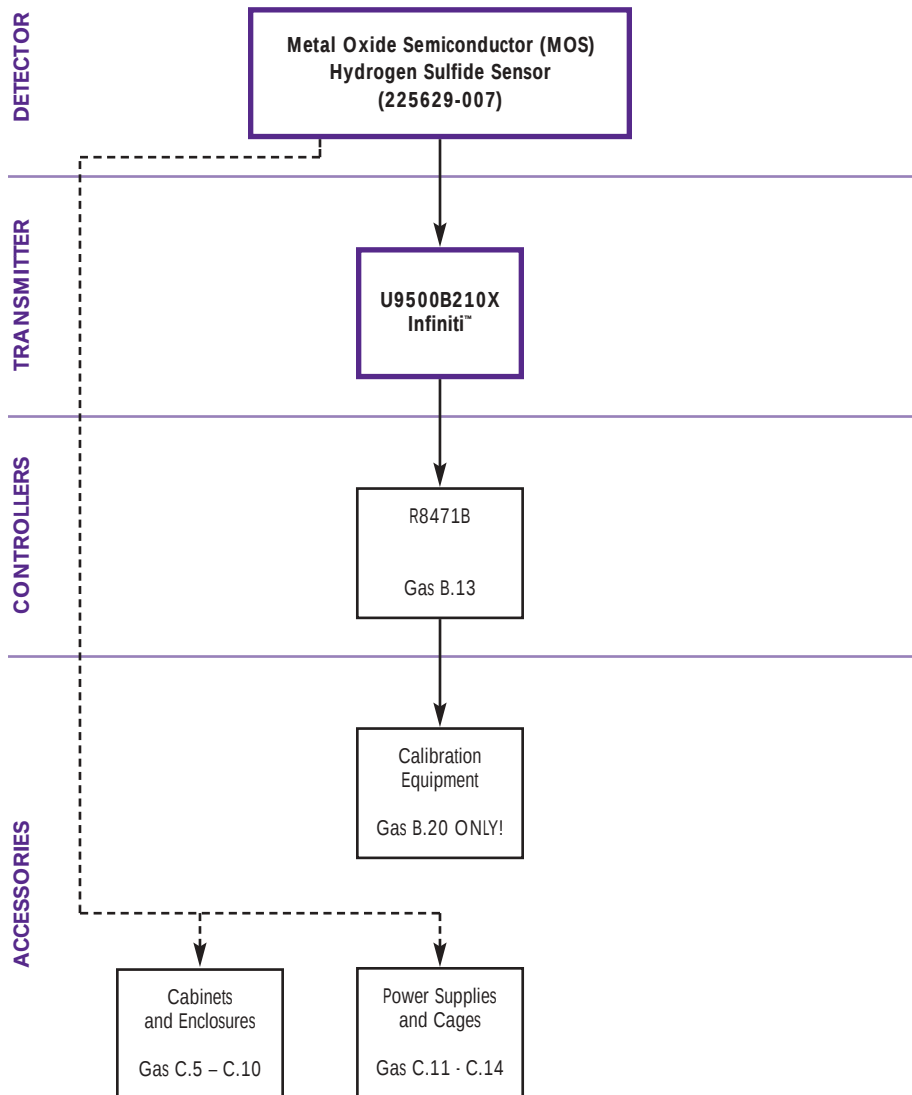


U9500B210X

Metal Oxide Semiconductor (MOS) Hydrogen Sulfide Sensor and **U9500B210X Infiniti® Transmitter and Junction Boxes** provide a good solution for hydrogen sulfide gas detection in dry areas where electrochemical sensor technology may not be preferred. Provides very fast response to hydrogen sulfide gas presence. Requires use of U9500B210X transmitter only. Also requires use of hydrogen sulfide gas calibration ampoules and mixing bottle for proper calibration. Not compatible with compressed hydrogen sulfide calibration gas kits.

- Linear isolated 4-20 mA output with eight character LCD display
- Non-intrusive automatic calibration
- Easy push button configuration
- Base version provides analog output only
- Optional relay package (three alarm, one fault)
- Extensive fault diagnostics

NOTE: Sensor separation capability is not offered.



KEY: — = Required - - - - - = Option —●— = Choice Required

Metal Oxide Semiconductor (MOS) Hydrogen Sulfide Sensor

Metal Oxide Semiconductor (MOS) Hydrogen Sulfide Sensor

Part Number	Description	ppm Range	Threads	use with	Ship Weight	Delivery
225629-004	MOS H2S gas sensor	0 - 100	SS 3/4 in NPT	410/710/740	1 lb	8 weeks
225629-007	MOS H2S gas sensor	0 - 100	SS 3/4 in NPT	U9500B210x only	1 lb	8 weeks

U9500B210x Infiniti® MOS-H2S Transmitter & Junction Box (must be ordered separately)

Part Number	OS Number	Conduit Entry*	Used with sensor type:	Relay	Material	Ports*	FM	CSA	CEN	SAA	RUS	Ship Weight	Delivery
006265-017	U9500B2102	n/a	225629-007 only		n/a			X				1 lb (.46 kg)	8 weeks
006265-018	U9500B2104		225629-007 only	X				X				1 lb (.46 kg)	8 weeks
Junction box													
006264-039	n/a	3/4 in	225629-007 only		AL	2 (L)		X				3.15 lb (1.43 kg)	8 weeks

* If two numbers are listed, the first number is for sensor entry and second number of for field cable entry(ies).

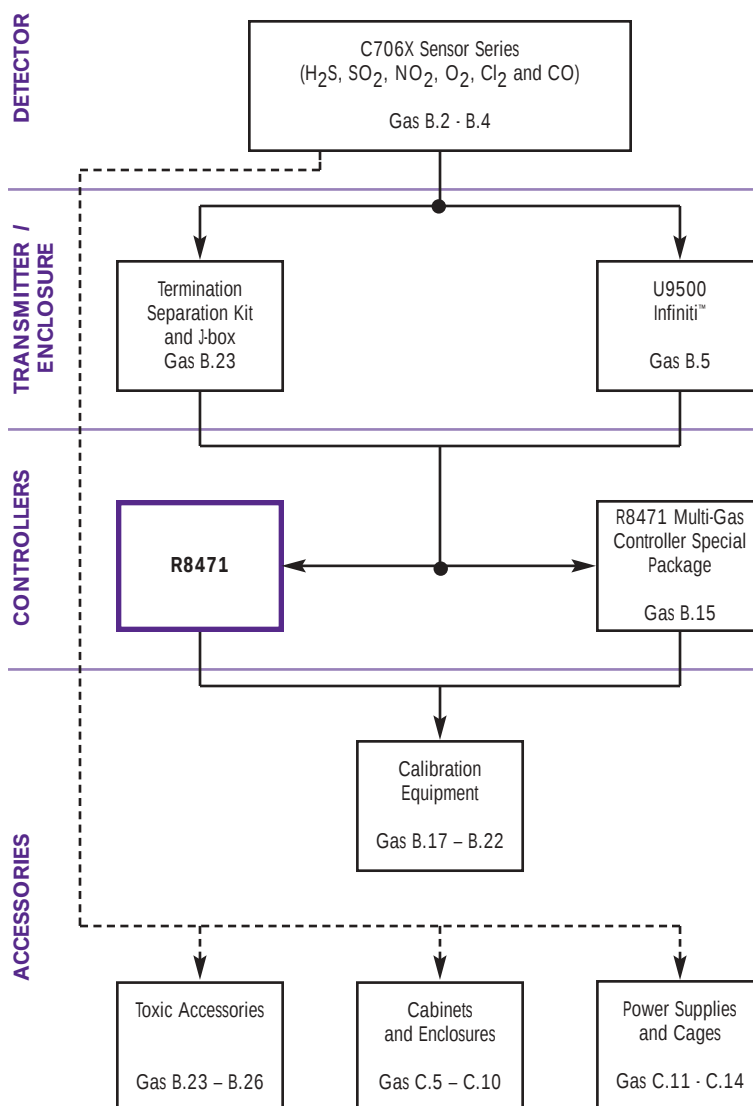
R8471 Single Channel Rack-Mounted Gas Controller



R8471

The **R8471 Single Channel Rack-Mounted Gas Controller** (Spec Sheet: 90-1045) is designed to interface directly with the C706X sensor series for H₂S, CO, Cl₂, O₂, SO₂ and NO₂ detection and is also compatible with U9500 Infiniti and other toxic gas transmitters. Features include:

- Digital and bar graph displays
- Individual low, high auxiliary and fault alarm LEDs
- Standard open collector outputs
- Premium model offers 4-20 mA output and a relay package
- Remote calibration capability
- Panel mount controllers are available; see L.8
- Available in special price package. Refer to C.1



KEY: — = Required - - - - - = Option —●— = Choice Required

R8471 Single Channel Rack-Mounted Gas Controller

R8471

R8471 Single Channel Rack-Mounted Gas Controllers

Part Number	OS Number	Toxic Gas	Base Model: O.C. Output	Premium Model: 20 mA Output and Relays	Height Config	ppm Range	Height	FM	CSA	RUS	Ship Weight	Delivery
005479-003	R8471B2002	Hydrogen Sulfide	X		4U	0 - 100 ppm	7.0 in	X	X		4 lb (1.8 kg)	4 weeks
005479-004	R8471B2004	Hydrogen Sulfide		X	4U	0 - 100 ppm	7.0 in	X	X		4 lb (1.8 kg)	4 weeks
005478-003	R8471B2001	Hydrogen Sulfide	X		3U	0 - 100 ppm	5.25 in	X	X		3 lb (1.35 kg)	8 weeks
005478-004	R8471B2003	Hydrogen Sulfide		X	3U	0 - 100 ppm	5.25 in	X	X		3 lb (1.35 kg)	8 weeks
005479-029	R8471B2010	Hydrogen Sulfide	X		4U	0 - 20	7.0 in		X		4 lb (1.8 kg)	8 weeks
005479-030	R8471B2012	Hydrogen Sulfide		X	4U	0 - 20	7.0 in	X	X		4 lb (1.8 kg)	8 weeks
005479-031	R8471B2006	Hydrogen Sulfide	X		4U	0 - 50	7.0 in	X	X		4 lb (1.8 kg)	8 weeks
005479-032	R8471B2008	Hydrogen Sulfide		X	4U	0 - 50	7.0 in	X	X		4 lb (1.8 kg)	8 weeks
005479-009	R8471D002	Chlorine	X		4U	0 - 10	7.0 in		X		4 lb (1.8 kg)	8 weeks
005479-010	R8471D004	Chlorine		X	4U	0 - 10	7.0 in		X		4 lb (1.8 kg)	8 weeks
005478-009	R8471D001	Chlorine	X		3U	0 - 10	5.25 in		X		3 lb (1.8 kg)	8 weeks
005478-010	R8471D003	Chlorine		X	3U	0 - 10	5.25 in		X		3 lb (1.8 kg)	8 weeks
005479-011	R8471E5506	Carbon Monoxide	X		4U	0 - 500	7.0 in		X		4 lb (1.8 kg)	8 weeks
005479-012	R8471E5508	Carbon Monoxide		X	4U	0 - 500	7.0 in		X		4 lb (1.8 kg)	8 weeks
005478-013	R8471E5101	Carbon Monoxide	X		3U	0 - 1000	5.25 in		X		3 lb (1.8 kg)	8 weeks
005478-014	R8471E5103	Carbon Monoxide		X	3U	0 - 1000	5.25 in		X		3 lb (1.8 kg)	8 weeks
005479-013	R8471E5102	Carbon Monoxide	X		4U	0 - 1000	7.0 in		X		4 lb (1.8 kg)	8 weeks
005479-014	R8471E5104	Carbon Monoxide		X	4U	0 - 1000	7.0 in		X		4 lb (1.8 kg)	8 weeks
005478-007	R8471E5001	Carbon Monoxide	X		3U	0 - 100	5.25 in		X		3 lb (1.8 kg)	8 weeks
005478-008	R8471E5003	Carbon Monoxide		X	3U	0 - 100	5.25 in		X		3 lb (1.8 kg)	8 weeks
005479-007	R8471E5002	Carbon Monoxide	X		4U	0 - 100	7.0 in		X		4 lb (1.8 kg)	8 weeks
005479-008	R8471E5004	Carbon Monoxide		X	4U	0 - 100	7.0 in		X		4 lb (1.8 kg)	8 weeks
005478-011	R8471E5505	Carbon Monoxide	X		3U	0 - 500	5.25 in		X		3 lb (1.8 kg)	8 weeks
005478-012	R8471E5507	Carbon Monoxide		X	3U	0 - 500	5.25 in		X		3 lb (1.8 kg)	8 weeks
005479-015	R8471F6002	Sulfur Dioxide	X		4U	0 - 100	7.0 in				4 lb (1.8 kg)	8 weeks
005479-016	R8471F6004	Sulfur Dioxide		X	4U	0 - 100	7.0 in				4 lb (1.8 kg)	8 weeks
005478-015	R8471F6001	Sulfur Dioxide	X		3U	1 - 100	5.25 in				3 lb (1.8 kg)	8 weeks
005478-016	R8471F6003	Sulfur Dioxide		X	3U	0 - 100	5.25 in				3 lb (1.8 kg)	8 weeks
005479-904	R8471B2004-R	Hydrogen Sulfide		X	4U	Selectable	7.0 in			X	4 lb (1.8 kg)	8 weeks
005479-027	R8471G6002	Nitrogen Dioxide	X		4U	0 - 20	7.0 in				4 lb (1.8 kg)	8 weeks
005479-028	R8471G6004	Nitrogen Dioxide	X	X	4U	0 - 20	7.0 in				4 lb (1.8 kg)	8 weeks
005478-027	R8471G6001	Nitrogen Dioxide	X		3U	0 - 20	5.25 in				3 lb (1.8 kg)	8 weeks
005478-028	R8471G6003	Nitrogen Dioxide	X	X	3U	0 - 20	5.25 in				3 lb (1.8 kg)	8 weeks
005478-025	R8471C3005	Oxygen	X		3U	0 - 25%	5.25 in		X		3 lb (1.35 kg)	8 weeks
005478-026	R8471C3007	Oxygen	X	X	3U	0 - 25%	5.25 in		X		3 lb (1.35 kg)	8 weeks
005479-025	R8471C3006	Oxygen	X		4U	0 - 25%	7.0 in		X		4 lb (1.8 kg)	8 weeks
005479-026	R8471C3008	Oxygen	X	X	4U	0 - 25%	7.0 in		X		4 lb (1.8 kg)	8 weeks

NOTE: Requires a mounting cage (sold separately on C.13).

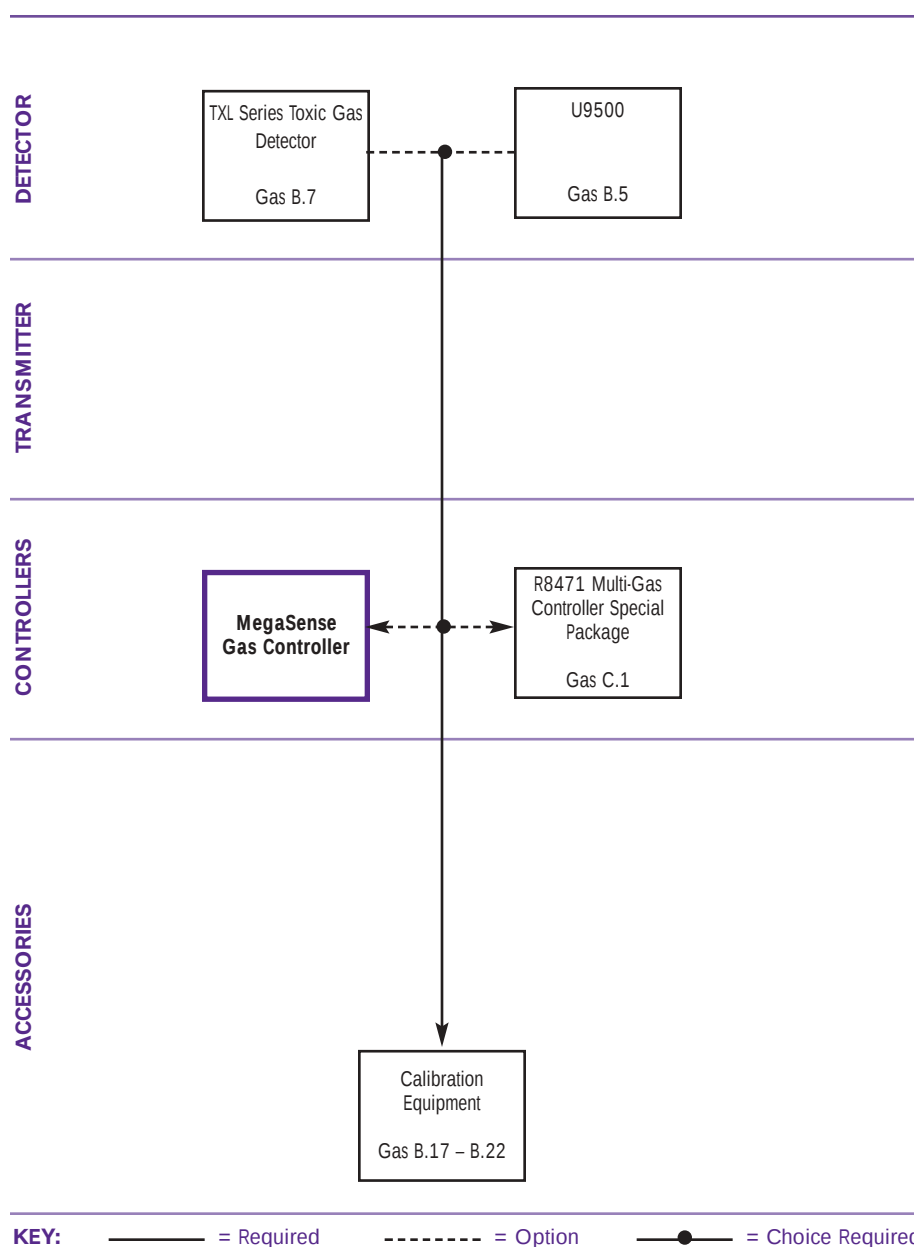
MegaSense Gas Controller



MegaSense Gas Controller

MegaSense multichannel gas detection system controller (Spec Sheet: TBA) is a PLC-based controller that supports from four to 24 channels of toxic and/or combustible gas detection. The MegaSense controller offers selectable gas-sensor types, automatic scanning of all channels in service, alarm and fault relay outputs, and a number of additional user-features and benefits. Weighing less than nine pounds, the weatherproof MegaSense controller is easy to install and commission, ensuring reliable protection for a wide range of industrial applications.

- Rugged fiberglass housing with clear door
- Common low, high and fault relay outputs standard
- Backlit, 2 line x 16 character LCD display
- Easily expanded
- Custom logic capabilities
- UL, CE approved



MegaSense Gas Controller

MegaSense Gas Controllers

Part Number	Model	Number of channels, system power required	Ship Weight	Delivery
000518-061	DECMS100004DX	4 channel input, 24VDC	11 lb (5 kg)	8 weeks
000518-063	DECMS100012DX	12 channel input, 24VDC	11 lb (5 kg)	8 weeks
000518-065	DECMS100016DX	16 channel input, 24VDC	11 lb (5 kg)	8 weeks
000518-067	DECMS100024DX	24 channel input, 24VDC	11 lb (5 kg)	8 weeks
000518-062	DECMS100004AX	4 channel input, 120VAC*	11 lb (5 kg)	8 weeks
000518-064	DECMS100012AX	12 channel input, 120VAC*	11 lb (5 kg)	8 weeks
000518-066	DECMS100016AX	16 channel input, 120VAC*	11 lb (5 kg)	8 weeks
000518-068	DECMS100024AX	24 channel input, 120VAC*	11 lb (5 kg)	8 weeks

* 120VAC to 24VDC power max current is 1.32 amps output. Recommended for use w/ toxic gas detectors only.

MegaSense Gas Controller Accessories

Part Number	Model	Description: # of channels, system power required	Ship Weight	Delivery
000518-061	DECMS100004DX	4 channel input, 24VDC	11 lb (5 kg)	8 weeks
000518-063	DECMS100012DX	12 channel input, 24VDC	11 lb (5 kg)	8 weeks
000518-065	DECMS100016DX	16 channel input, 24VDC	11 lb (5 kg)	8 weeks

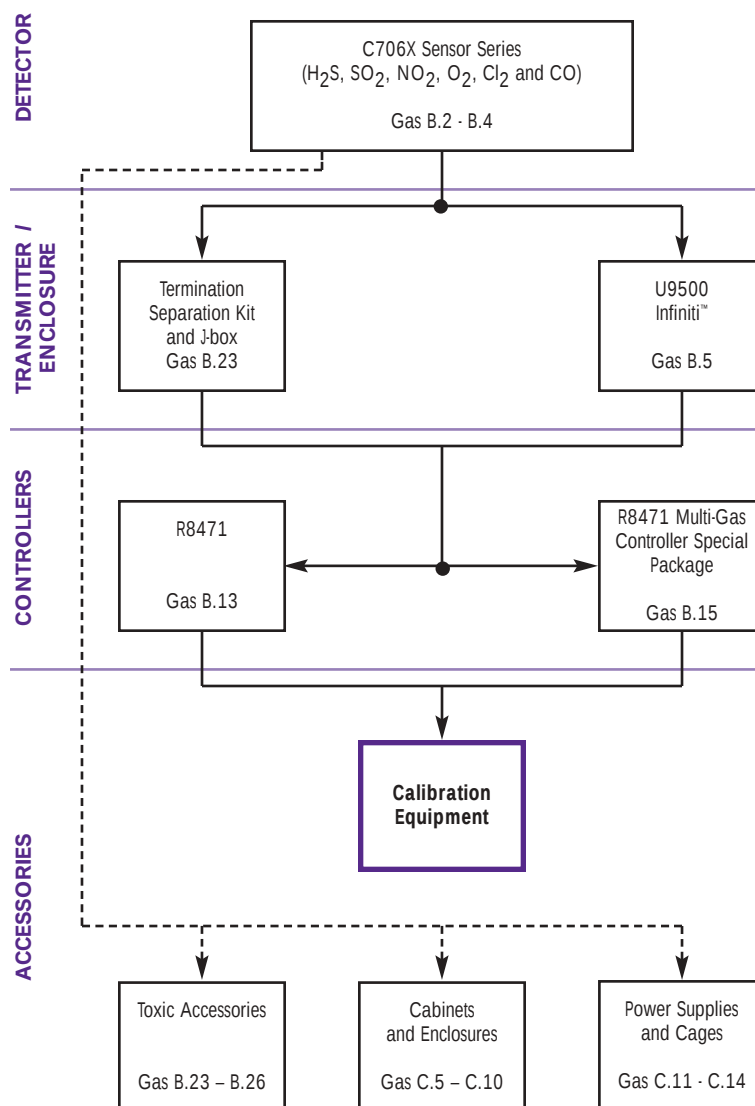
C706X Calibration Gas Kits



Toxic Calibration Gas Kit

Toxic Calibration Gas Kit consists of a sturdy carrying case containing:

- Two 3.6 cubic foot (103 liters) cylinders of specified gas
- A regulator and pressure indicator
- Three-foot tubing
- Calibration Cup



KEY: — = Required - - - - - = Option —●— = Choice Required

C706X Calibration Gas Kit

Toxic Calibration Gas Kits

Part Number	Concentration	Gas	Use With	Ship Weight	Delivery
227115-001	50 ppm	Hydrogen Sulfide	C7064 EC	11.5 lb (5.23 kg)	4 weeks
227115-002	20 ppm	Hydrogen Sulfide	C7064 EC	11.5 lb (5.23 kg)	8 weeks
227115-014	10 ppm	Hydrogen Sulfide	C7064 EC	11.5 lb (5.23 kg)	8 weeks
227115-015	25 ppm	Hydrogen Sulfide	C7064 EC	11.5 lb (5.23 kg)	8 weeks
227115-003	50 ppm	Carbon Monoxide	C7066E	11.5 lb (5.23 kg)	8 weeks
227115-004	250 ppm	Carbon Monoxide	C7066E	11.5 lb (5.23 kg)	8 weeks
227115-005	500 ppm	Carbon Monoxide	C7066E	11.5 lb (5.23 kg)	8 weeks
227115-013	5 ppm	Chlorine	C7067E	11.5 lb (5.23 kg)	8 weeks
227115-006	20.9%	Oxygen	C7065E	11.5 lb (5.23 kg)	8 weeks
227115-011	10 ppm	Nitrogen Dioxide	C7069E	11.5 lb (5.23 kg)	8 weeks
227115-012	50 ppm	Sulfur Dioxide	C7068E	11.5 lb (5.23 kg)	8 weeks

C706X Calibration Kit

Toxic Calibration Gas Kit--Replacement Cylinders

Part Number	Gas	Use With	Concentration	Ship Weight	Delivery
227117-001	Hydrogen Sulfide	C7064 EC	50 ppm	1.5 lb (0.7 kg)	4 weeks
227117-002	Hydrogen Sulfide	C7064 EC	20 ppm	1.5 lb (0.7 kg)	8 weeks
227117-003	Carbon Monoxide	C7066E	50 ppm	1.5 lb (0.7 kg)	8 weeks
227117-004	Carbon Monoxide	C7066E	250 ppm	1.5 lb (0.7 kg)	8 weeks
227117-005	Carbon Monoxide	C7066E	500 ppm	1.5 lb (0.7 kg)	8 weeks
227117-006	Chlorine	C7067E	5 ppm	1.5 lb (0.7 kg)	8 weeks
226166-006	Oxygen	C7065E	20.9%	1.5 lb (0.7 kg)	4 weeks
227117-007	Chlorine	C7067E	100 ppm	1.5 lb (0.7 kg)	8 weeks
227117-008	Sulfur Dioxide	C7068E	50 ppm	1.5 lb (0.7 kg)	4 weeks
227117-010	Nitrogen Dioxide	C7069E	10 ppm	1.5 lb (0.7 kg)	8 weeks
227117-011	Hydrogen Sulfide	C7064 EC	10 ppm	1.5 lb (0.7 kg)	8 weeks
227117-012	Hydrogen Sulfide	C7064 EC	25 ppm	1.5 lb (0.7 kg)	8 weeks

Toxic Calibration Kit Replacement Parts

Part Number	Description	Ship Weight	Delivery
162552-001	Regulator, 1 LPM	8 oz (0.23 kg)	8 weeks
162553-001	Carrying Case	8 oz (0.23 kg)	8 weeks
101678-007	3 Foot tubing	8 oz (0.23 kg)	4 weeks
004976-001	Standard calibration cup, SS (1)	8 oz (0.23 kg)	4 weeks
005964-001	Calibration cup (C706X Series)	8 oz (0.23 kg)	4 weeks
113006-001	Calibration cup O-ring (C706X Series)	8 oz (0.23 kg)	4 weeks

TXL Calibration Gas Kits

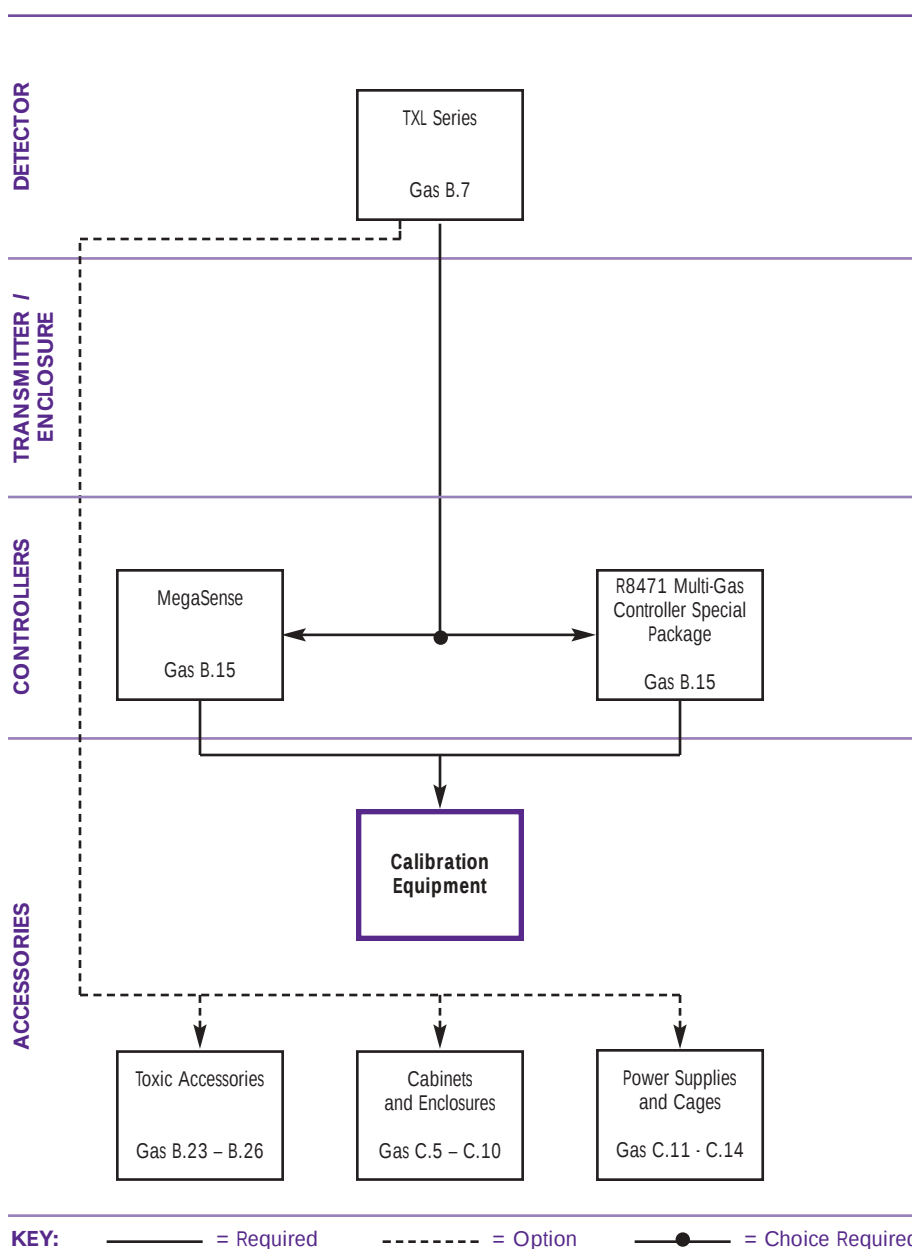


Toxic Calibration Gas Kit

Toxic Calibration Gas Kit consists of a sturdy carrying case containing:

- Two 58L cylinders provided: One of specified cal gas and one of "zero" clean air
- A regulator and pressure indicator
- Three-foot tubing
- Calibration Cup

NOTE: Not compatible with C706X sensor electrochemical gas detectors.



TXL Calibration Gas Kit

TXL Series Calibration Gas Kits*

Part Number	Model Number	Gas Type	Cal gas Concentration	Ship Weight	Delivery
000518-209	TXL-Kit-CL2	Chlorine	PPM	1 lb (0.5 kg)	8 weeks
000518-204	TXL-Kit-CO	Monoxide	50 PPM	1 lb (0.5 kg)	8 weeks
000518-201	TXL-Kit-H2S	sulfide	25 PPM	1 lb (0.5 kg)	8 weeks
000518-208	TXL-Kit-HCN	cyanide	PPM	1 lb (0.5 kg)	8 weeks
000518-203	TXL-Kit-NH3	ammonia	25 PPM	1 lb (0.5 kg)	8 weeks
000518-205	TXL-Kit-NO2	dioxide	10 PPM	1 lb (0.5 kg)	8 weeks
000518-206	TXL-Kit-PH3	phosphine	5 PPM	1 lb (0.5 kg)	8 weeks
000518-207	TXL-Kit-SO2	sulfur dioxide	10 PPM	1 lb (0.5 kg)	8 weeks
000518-212	TXL-Kit-HCL	chloride	2 PPM	1 lb (0.5 kg)	8 weeks
000518-211	TXL-Kit-O2	oxygen	21% O2	1 lb (0.5 kg)	8 weeks

* only compatible with TXL-series gas detectors; not compatible with any other DEC gas detection products

MOS Hydrogen Sulfide Sensor Calibration Equipment



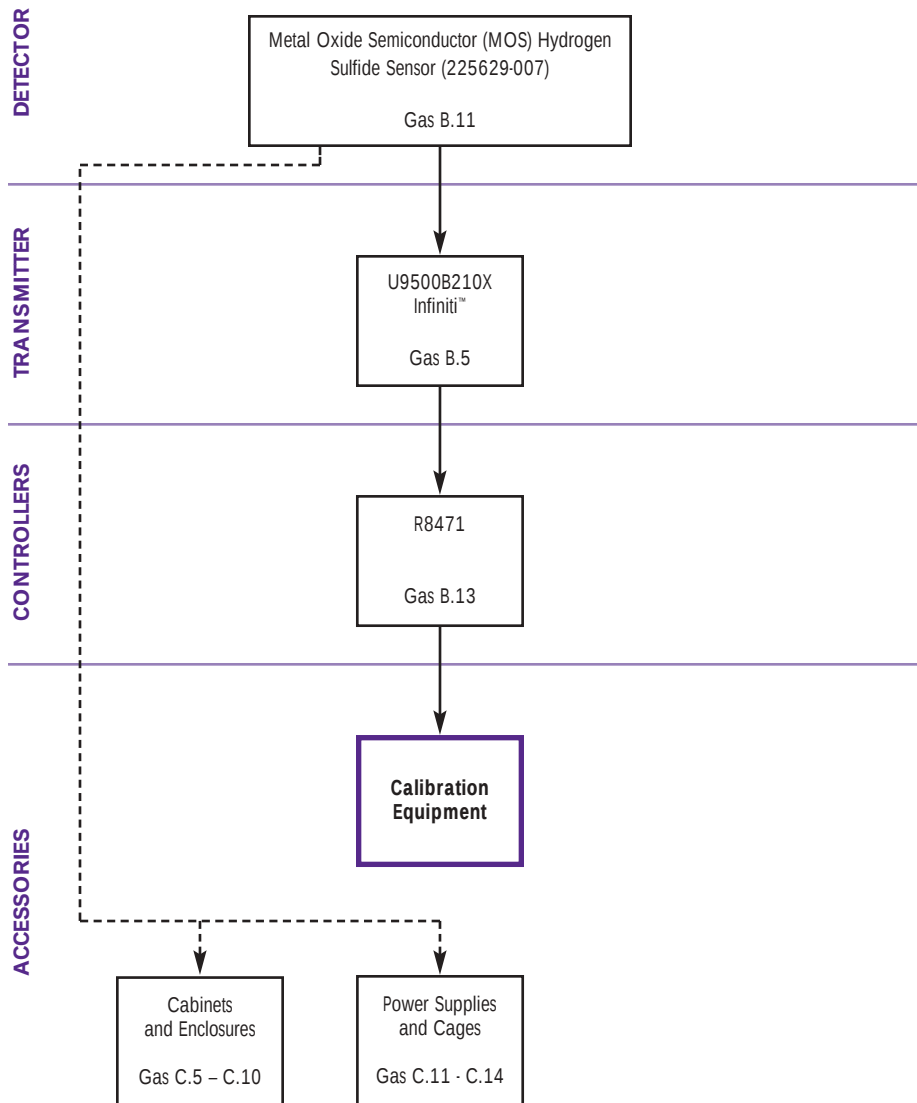
Ampoule Calibration Kit

Ampoule Calibration Kit. Contain ampoules and a calibration bottle. These kits are a direct replacement for our old ampoule calibration kits, and are available in the following configurations:

- (6) 10 ppm and (6) 40 ppm ampoules, plus new cal bottle
- (12) 20 ppm ampoules, plus new cal bottle
- (12) 40 ppm ampoules, plus cal bottle

Calibration Bottle. An improved design ensures delivery of a consistent hydrogen sulfide gas concentration to Det-Tronics metal oxide semiconductor (MOS) sensor during calibration. A thumb-screw ampoule breaking system ensures quick, easy hydrogen sulfide release and an externally-actuated internal mixing fan ensuring a thoroughly mixed, consistent hydrogen sulfide gas concentration is applied to the sensor. The new calibration bottle is required for use with all new ampoules, and is not compatible with old ampoules.

Hydrogen Sulfide (H₂S) Ampoules. Ampoules must be used with our new calibration bottle for satisfactory results.



KEY: — = Required - - - - - = Option —●— = Choice Required

MOS Hydrogen Sulfide Sensor Calibration Equipment

Ampoule Calibration Kits

Part Number	Description	Ship Weight	Delivery
007098-001	Ampoule kit (10/40ppm)	2 lb (0.92 kg)	4 weeks
007098-002	Ampoule kit (20ppm)	2 lb (0.92 kg)	4 weeks
007098-003	Ampoule kit (40ppm)	2 lb (0.92 kg)	4 weeks

Calibration Bottle

Part Number	Description	Ship Weight	Delivery
007067-001	Calibration bottle	1 lb (0.46 kg)	4 weeks

Hydrogen Sulfide Ampoules

Part Number	Description	Ship Weight	Delivery
007099-001	10 ppm ampoule	1 lb (0.46 kg)	4 weeks
007100-001	20 ppm ampoule	1 lb (0.46 kg)	4 weeks
007101-001	40 ppm ampoule	1 lb (0.46 kg)	4 weeks

MOS Calibration

C706X Detector Accessories



Toxic Sensor Termination and Separation Junction Box

Toxic Sensor Termination and Separation Junction Boxes offer easy termination of all C706X series sensors.

- Recommended for use with R8471 and U9500 controllers
- Two-port J-boxes with conduit entries 90° on center
- Enables remote sensor mounting



Sample Draw System Adapters

Sample Draw System Adapters permit the C706X sensors to function within gas sample extraction systems. Recommended for positive pressure sample stream lines.

- Air-tight interface via O-ring eliminates gas sample leakage
- Includes inlet and outlet compression fittings for 0.25 inch outside diameter tubing



Duct Mount Adapters

Duct Mount Adapters mount C706X detectors to air handling duct work.

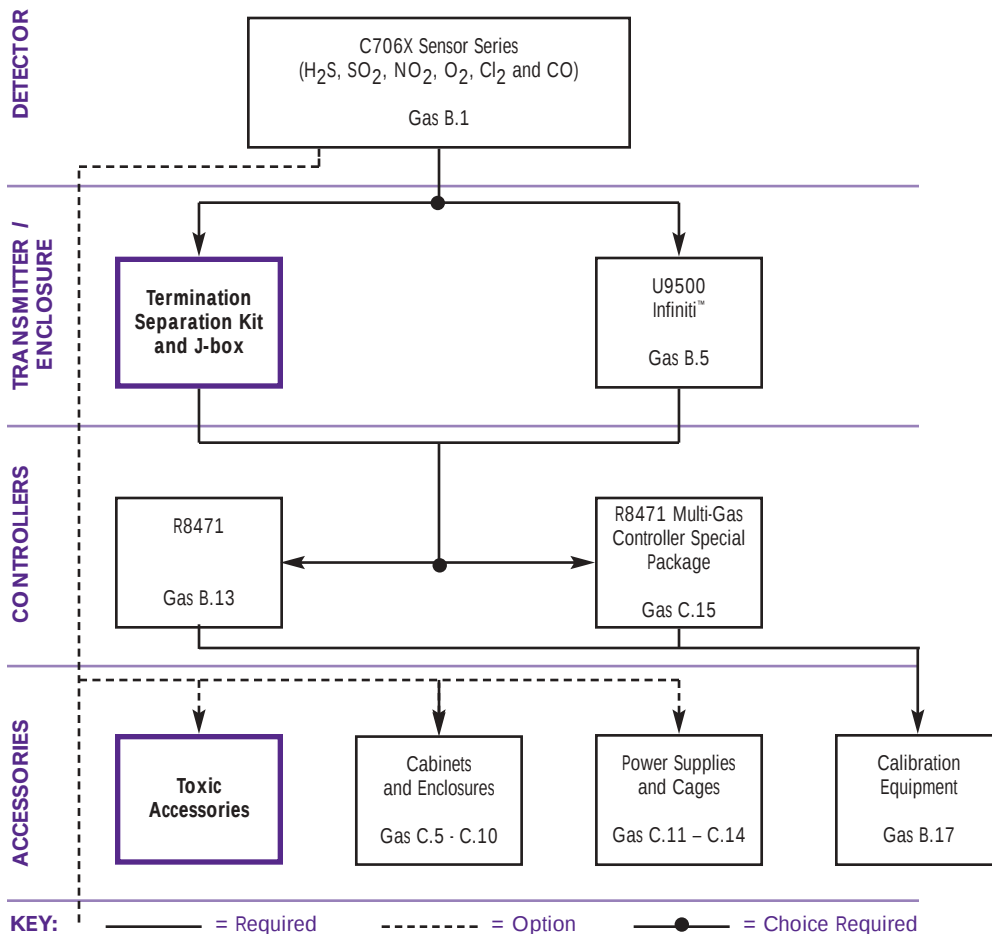
- Monitors toxic gases within air handling systems while maintaining easy sensor access

Portable H₂S, NO₂ and SO₂ Calibrator.

- Bench-top calibrator for toxic EC cells
- Calibrates one or two cells simultaneously
- Requires 120 vac, compressed zero and span gases, milliamp meter. Not intended for hazardous areas.
- Enables easy sensor cell exchange in the field



Portable H₂S, NO₂ and SO₂ Calibrator.



C706X Detector Accessories

C706X Sensor Termination and Separation Junction Boxes

Part Number	Threads**	Material	Ports*	Includes	FM	CSA	CEN	SAA	RUS	Ship Weight	Delivery
226365-111	20mm/25mm	AL	2 - L	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
226365-133	3/4 in	AL	2 - L	Required hardware	X	X	X			2.2 lb (1.0 kg)	8 weeks
226365-911	20 mm/25 mm	AL	2 - L	Required hardware					X	2.2 lb (1.0 kg)	8 weeks
226757-002	Electrochemical sensor termination connector board only									8 oz.	4 weeks

* "L" designates 90 degree conduit entry orientation. "ST" designates straight-thru or 180 degree orientation.

** If two numbers are listed, the first number is for detector entry and the second number is for field cabling

Sample Draw System Adapters - C706X Only

Part Number	Material	Ship Weight	Delivery
006517-001	SS	2.5 lb (1.28 kg)	4 weeks
006517-002	AL	1 lb (0.46 kg)	4 weeks

C706X Duct Mount Adapters

Part Number	Use With	Ship Weight	Delivery
226846-006	C7066, C7067, C7068, C7069	6 oz (0.17 kg)	8 weeks
226846-007	C7065	6 oz (0.17 kg)	8 weeks
226846-002	C7064C, C7064E	6 oz (0.17 kg)	8 weeks

NOTE: NOT recommended for conditions of negative pressure, stratified, non-homogenous air flow or where duct work with laminar exist

Portable C706X H₂S, NO₂, SO₂ Calibrator

Part Number	Use With	Ship Weight	Delivery
000805-003	005434-001	8.5 lb (3.9 kg)	8 weeks

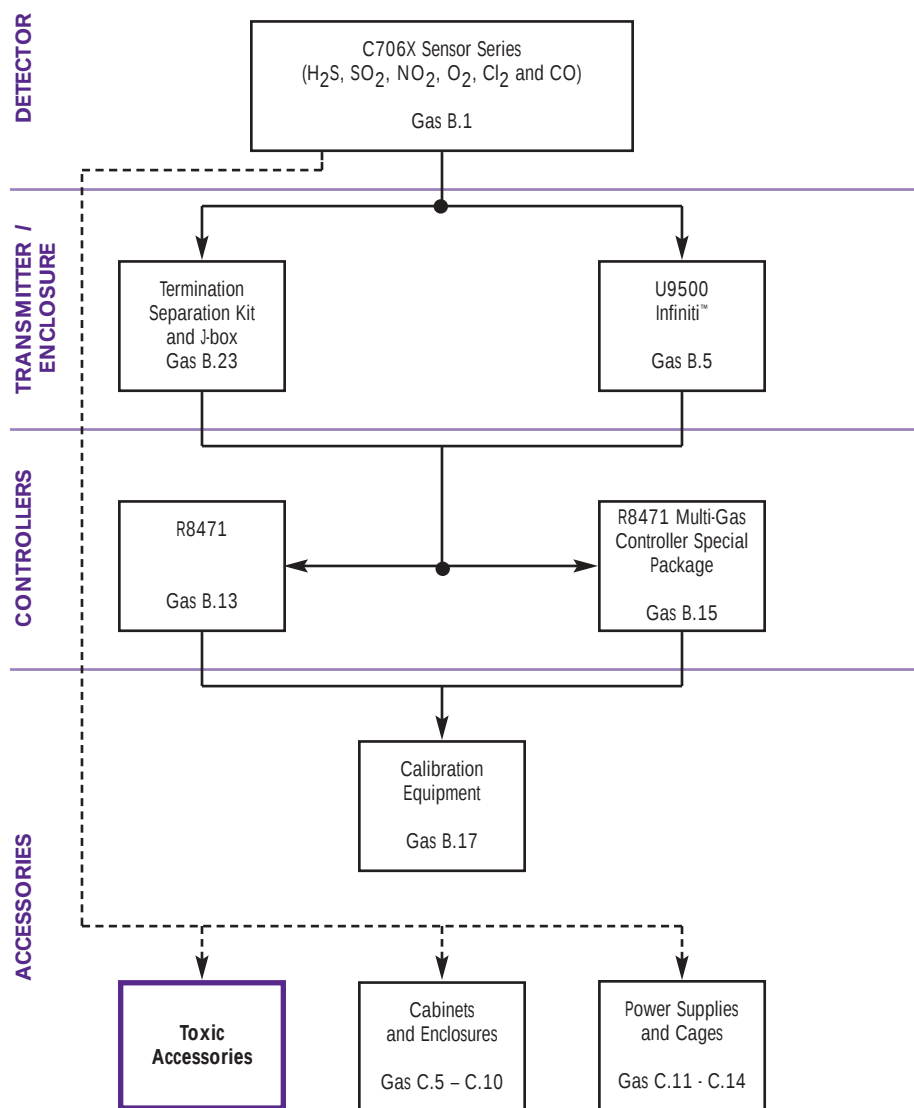
Model Q812 Duct Mount Enclosure Series



H₂S Model Q812 Duct Mount Enclosure Series

Model Q812 Duct Mount Enclosure Series (Manual: 95-8459) available with all C706X sensors. Other toxic sensors available, contact factory. Provides detection in environments involving air handling, heating, ventilating or air conditioning ducts.

- Mounts to a flat duct wall surface
- A stainless steel sampling tube spans the cross section of the duct; a one-foot tube returns the sample
- Allows large volume, continuous air sampling
- Requires 600 – 4000 fpm velocity
- Stainless steel NEMA 4X enclosure



KEY: — = Required - - - - - = Option ● = Choice Required

Toxic and Oxygen Gas B.25

Model Q812

H₂S Model Q812 Duct Mount Enclosure Series

Model Q812 Duct Mount Enclosure Series

Part Number*	Gas type and sensor	Material	Tube Length	Gas Measurement Range	Ship Weight	Delivery
000812-001	C7064E-H ₂ S	SS	**	0-100 ppm	10.5 lb (4.8 kg)	8 weeks
000812-002	C7064E-H ₂ S	SS	**	0-20 ppm	10.5 lb (4.8 kg)	8 weeks
000812-003	C7066E-CO	SS	**	0-100 ppm	10.5 lb (4.8 kg)	8 weeks

* Price includes preinstalled electrochem gas detector as noted.

** One inlet tube (000214-XXX) and one return tube (000214-130) at no extra cost, customer must specify desired inlet tube length at order entry.

Model Q812

Hydrogen Sulfide Model Q812 Duct Mount Enclosure Series Spare Tubes

Part Number	Repl Tubing	Tube Length	Range	Ship Weight	Delivery
000214-126	X	1 ft		8 oz (0.23 kg)	8 weeks
000214-127	X	3 ft		8 oz (0.23 kg)	8 weeks
000214-128	X	6 ft		8 oz (0.23 kg)	8 weeks
000214-129	X	10 ft		8 oz (0.23 kg)	8 weeks
000214-130	X	1 ft return		8 oz (0.23 kg)	8 weeks

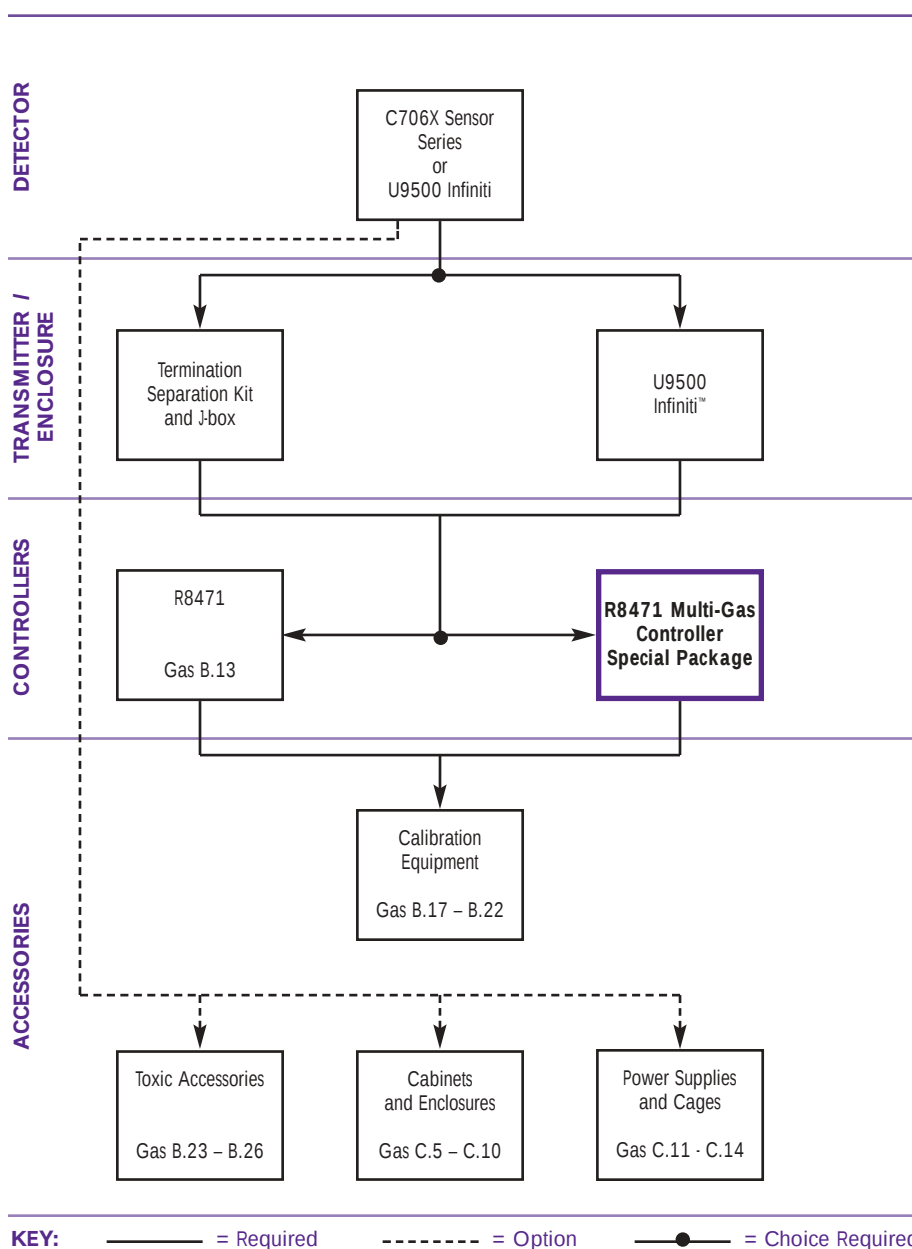
R8471 Multi-Gas Controller Special Package



**R8471 Multi-Gas Controller
Special Package**

R8471 Multi-Gas Controller Special Package provides any combination of two, four, six or eight model R8471 controllers along with the matching mounting cage. Benefits of this special offer include:

- Specify any combination of combustible, combustible IR, H₂S, SO₂, NO₂, CO or CL₂ controllers
- Selectable controller configuration: choose either standard or premium controller configurations
- Individual analog and relay contact outputs per channel provided with premium controllers
- Open collector transistor outputs only provided with standard controllers



R8471 Multi-Gas Controller Special Package

Premium R8471 Controller Packages (with alarm relays and 4-20ma outputs)

Package	Description	Shipping Weight	Delivery
PP2	Any two premium controllers w/ Q4004A2020 two position cage	20 lbs	8 weeks
PP4	Any four premium controllers w/ Q4004D2007 four position cage	25 lbs	8 weeks
PP6	Any six premium controllers w/ Q4004D2009 six position cage	30 lbs	8 weeks
PP8	Any eight premium controllers w/ Q4004B2011 eight position cage	35 lbs	8 weeks

Standard R8471 Controller Packages (no alarm relays or 4-20 outputs)

Package	Description	Shipping Weight	Delivery
SP2	Any two standard controllers w/ Q4004A2020 two position cage	20 lbs	8 weeks
SP4	Any four standard controllers w/ Q4004D2007 four position cage	25 lbs	8 weeks
SP6	Any six standard controllers w/ Q4004D2009 six position cage	30 lbs	8 weeks
SP8	Any eight standard controllers w/ Q4004B2011 eight position cage	35 lbs	8 weeks

Note: Customer must specify exactly which gas controller models are required before order will be processed.

No pre-wiring/backplane installation is included, but can be quoted on request.

Package pricing applies to 4U height model R8471 controllers only (3U height versions excluded).

Panel Mount R8471 Controller Assembly



Panel Mount R8471

Panel Mount R8471 Controller Assembly (Spec Sheet: 90-1046) consists of either one or two standard R8471 controllers, and is modified to enable flat-panel mounting. Typical use includes installation within wall-mount enclosures such as the model Q2050 series wall-mount fiberglass enclosure series.

- Controller faceplates and field wiring termination strips rotated outward for easy wiring and operator interface
- Standoffs used for mounting the assembly to a flat panel
- Operation and calibration identical to standard R8471 controller series
- No mounting cage required
- Four panel-mount controller configurations available:
 - 006631-xxx series for single-controller assembly field upgrades (one channel to two channels),
 - 0006632-xxx series for new single-controller assembly requirements,
 - 0006633-xxx series for complete, two-controller assembly requirements, and
 - 0007000-xxx series for spare controller board only requirements.

Panel Mount R8471 Controller Assembly

Panel Mount R8471

Panel Mount R8471

Part Number	Gas Type	Description	Relays	No. of Controllers	Wiring Terminal Plate	Metal Cover	Ship Weight	Delivery
006631-007	catalytic	Single controller assembly with cover and terminal; customer to specify desired controller position (either upper or lower level position).	X	1		X	2.15 lb(1.4 kg)	8 weeks
006631-008	H2S (100ppm full scale)	Single controller assembly with cover and terminals; customer to specify desired controller position (either upper or lower level position). Recommended for field upgrade.	X	1		X	2.15 lb(1.4 kg)	8 weeks
006631-009	PIR9400	Single controller assembly with cover and terminals; customer to specify desired controller position (either upper or lower level position). Recommended for field upgrade.	X	1		X	2.15 lb(1.4 kg)	8 weeks
006631-010	chlorine	Single controller assembly with cover and terminals; customer to specify desired controller position (either upper or lower level position). Recommended for field upgrade.	X	1		X	2.15 lb(1.4 kg)	8 weeks
006631-011	oxygen	Single controller assembly with cover and terminals; customer to specify desired controller position (either upper or lower level position). Recommended for field upgrade.	X	1		X	2.15 lb(1.4 kg)	8 weeks
006631-012	H2S (20ppm full scale)	Single controller assembly with cover and terminals; customer to specify desired controller position (either upper or lower level position). Recommended for field upgrade.	X	1		X	2.15 lb(1.4 kg)	8 weeks
006631-013	H2S (50ppm full scale)	Single controller assembly with cover and terminals; customer to specify desired controller position (either upper or lower level position). Recommended for field upgrade.	X	1		X	2.15 lb(1.4 kg)	8 weeks
006632-001	catalytic	Single controller assembly w/cover & terminals; controller installed in upper position only	X	1	X	X	2.15 lb(1.4 kg)	8 weeks
006632-002	H2S (100ppm full scale)	Single controller assembly w/cover & terminals; controller installed in upper position only	X	1	X	X	2.15 lb(1.4 kg)	8 weeks
006632-003	PIR9400	Single controller assembly w/cover & terminals; controller installed in upper position only	X	1	X	X	2.15 lb(1.4 kg)	8 weeks
006632-004	oxygen	Single controller assembly w/cover & terminals; controller installed in upper position only	X	1	X	X	2.15 lb(1.4 kg)	8 weeks
006632-005	H2S (20ppm full scale)	Single controller assembly w/cover & terminals; controller installed in upper position only	X	1	X	X	2.15 lb(1.4 kg)	8 weeks
006632-006	H2S (50ppm full scale)	Single controller assembly w/cover & terminals; controller installed in upper position only	X	1	X	X	2.15 lb(1.4 kg)	8 weeks
006633-001	catalytic	Complete (2) controller assembly with wiring terminal strips	X	2	X	X	5.8 lb(2.8 kg)	8 weeks
006633-002	H2S (100ppm full scale)	Complete (2) controller assembly with wiring terminal strips	X	2	X	X	5.8 lb(2.8 kg)	8 weeks
006633-003	PIR9400	Complete (2) controller assembly with wiring terminal strips	X	2	X	X	5.8 lb(2.8 kg)	8 weeks
006633-004	oxygen	Complete (2) controller assembly with wiring terminal strips	X	2	X	X	5.8 lb(2.8 kg)	8 weeks
006633-005	H2S (20ppm full scale)	Complete (2) controller assembly with wiring terminal strips	X	2	X	X	5.8 lb(2.8 kg)	8 weeks
006633-006	H2S (50ppm full scale)	Complete (2) controller assembly with wiring terminal strips	X	2	X	X	5.8 lb(2.8 kg)	8 weeks
007000-001	catalytic	single controller board only; no cover or terminals	X	1			2.15 lb(1.4 kg)	8 weeks
007000-002	H2S (100ppm full scale)	single controller board only; no cover or terminals	X	1			2.15 lb(1.4 kg)	8 weeks
007000-003	PIR9400	single controller board only; no cover or terminals	X	1			2.15 lb(1.4 kg)	8 weeks
007000-004	chlorine	single controller board only; no cover or terminals	X	1			2.15 lb(1.4 kg)	8 weeks
007000-005	oxygen	single controller board only; no cover or terminals	X	1			2.15 lb(1.4 kg)	8 weeks
007000-006	H2S (20ppm full scale)	single controller board only; no cover or terminals	X	1			2.15 lb(1.4 kg)	8 weeks
007000-007	H2S (50ppm full scale)	single controller board only; no cover or terminals	X	1			2.15 lb(1.4 kg)	8 weeks
007000-008	CO (100ppm full scale)	single controller board only; no cover or terminals	X	1			2.15 lb(1.4 kg)	8 weeks

Q1020A Wall Mount Enclosure



Q1020A
Wall Mount Enclosure

Q1020A Wall Mount Enclosure (Manual: 95-8350) consists of a three-compartment metal enclosure with a 19 inch metric cage assembly mounted inside. Addition of a power supply or other extra items (i.e., external relays, audible alarms and lights) will affect the number of units to be installed. Consult factory with specific requirements.

- Holds up to 16 R8471 controllers
- Rated IP55 suitable for indoor applications
- Will provide a degree of protection against dust and water spray
- Locks and full clear viewing window

NOTE: Installation and wiring of backplates at factory to a field wiring terminal strip. Provided with one standard electrical drawing and one standard mechanical drawing. Additional drawings (i.e. COV layout, detector placement) and engineering provided at our standard rate. Additional enclosure charges will include pre-wiring fee of \$125 for all controllers. NO DISCOUNT ALLOWED ON THIS CHARGE.

Q1020A Wall Mount Enclosure

Q1020A Wall Mount Enclosures

Part Number	OS Number	Dimensions	Use With	Ship Weight	Delivery
000803-001	Q1020A1001	13" x 24" x 21"	8 flame/16 gas	80 lb (36 kg)	12 weeks
000803-002	Q1020A2001	26" x 24" x 21"	16 flame/32 gas	160 lb (72 kg)	12 weeks

Q1020A Enclosure

Q2050 Series Wall Mount Enclosures



**Q1050 Series
Wall Mount Enclosures**

Q2050 Series Wall Mount Enclosures (Spec Sheet: 90-1075). Consists of NEMA 4X fiberglass enclosure with full view polycarbonate window.

- Holds up to six channels of panel-mounted R8471 gas controllers
 - Controllers are packed in two-controller assemblies
 - Any combination of combustible or toxic controllers may be selected for installation
 - Easy access terminal strip for controller wiring
 - Field wiring terminal strip for units with power supplies is standard
 - Virtual plug and play installation
-

Q2050 Series Wall Mount Enclosures

Part Number	Relays	Power Supply	# of Ctrls	Height	Depth	Width	Ship Weight	Delivery
Q2050			1	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	12.5 lb (5.7 kg)	8 weeks
	X		1	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	12.5 lb (5.7 kg)	8 weeks
			2	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	13.0 lb (5.9 kg)	8 weeks
	X		2	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	13.0 lb (5.9 kg)	8 weeks
			3	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	14.5 lb (6.6 kg)	8 weeks
	X		3	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	14.5 lb (6.6 kg)	8 weeks
			4	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	15.0 lb (6.8 kg)	8 weeks
	X		4	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	15.0 lb (6.8 kg)	8 weeks
Q2051		X	1	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	19.0 lb (8.6 kg)	8 weeks
	X	X	1	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	19.0 lb (8.6 kg)	8 weeks
		X	2	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	19.5 lb (8.8 kg)	8 weeks
	X	X	2	15.5 in (381 mm)	8.25 in (210 mm)	12.75 in (324 mm)	19.5 lb (8.8 kg)	8 weeks
		X	1	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	25.0 lb (11.3 kg)	8 weeks
	X	X	1	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	25.0 lb (11.3 kg)	8 weeks
		X	2	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	25.5 lb (11.6 kg)	8 weeks
	X	X	2	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	25.5 lb (11.6 kg)	8 weeks
Q2052		X	3	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	26.0 lb (11.8 kg)	8 weeks
	X	X	3	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	26.0 lb (11.8 kg)	8 weeks
		X	4	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	26.5 lb (12.0 kg)	8 weeks
	X	X	4	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	26.5 lb (12.0 kg)	8 weeks
			5	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	19.5 lb (8.8 kg)	8 weeks
	X		5	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	19.5 lb (8.8 kg)	8 weeks
			6	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	20.0 lb (9.1 kg)	8 weeks
	X		6	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	20.0 lb (9.1 kg)	8 weeks
Q2054		X	5	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	26.0 lb (11.8 kg)	8 weeks
	X	X	5	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	26.0 lb (11.8 kg)	8 weeks
		X	6	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	26.5 lb (12.0 kg)	8 weeks
	X	X	6	19.5 in (495 mm)	9.63 in (245 mm)	17.3 in (439 mm)	26.5 lb (12.0 kg)	8 weeks

NOTE: Utilizes panel-mounted R8471 controllers.

Options: Strobe Warning Light, Horn and Miscellaneous



Strobe Warning Light, Horn
and Miscellaneous Options

Strobe Warning Light, Horn and Miscellaneous Options.

- Optional notification devices for use with the Q2050 or other enclosure
- Custom installation quoted separately

Options: Strobe Warning Light, Horn and Miscellaneous

Strobe Warning Light

Part Number	Voltage	Type	Color	Delivery
102778-001	120 vac	General Purpose	Blue	8 weeks
102778-002	120 vac	General Purpose	Red	8 weeks
102778-003	24 vdc	General Purpose	Blue	8 weeks
102778-004	24 vdc	General Purpose	Red	8 weeks
102778-005	24 vdc	General Purpose	Amber	8 weeks
102778-006	120 vac	General Purpose	Amber	8 weeks

Horn

Part Number	Voltage	Description	Delivery
102777-001	120 vac	General Purpose	8 weeks

Miscellaneous Options

Part Number	Description	Delivery
102780-001	Reset push button	8 weeks
102781-001	Reset label	8 weeks
102525-001	Sealed conduit entry, 3/4 inch	8 weeks

NOTE: Mounts separately from enclosure.

Power Supplies

000507-005 and 000507-006 24 vdc Power Supplies (Spec Sheet: 90-1035). Ideally suited for Q1020 Wall Mount enclosures or other enclosures that contain Det-Tronics gas detection equipment.

- Open frame construction
- Operates on 120/240 vac 50/60 Hz



**000507-005, 000507-006
24 vdc Power Supplies**

W4810 Power Supply (Spec Sheet: 90-1081).

- Converts 120 vac to 24 vdc at 830 mA nominal output
- Two amps maximum output at startup
- Housed in an explosion-proof enclosure
- CSA approved



W4810 Power Supply

000604-012 Wall Mount Enclosure with 000507-006 Power Supply (24 vdc) mounted inside.

- For indoor use only
 - Fused terminal strip provided for field wiring
 - 24 vdc at 12 amps power supply included
-

Power Supplies

24 vdc Power Supplies

Part Number	Amps	Ship Weight	Delivery
000507-005	3.6	6.5 lb (2.95 kg)	4 weeks
000507-006	12	15 lbs	4 weeks

W4810 Power Supply

Part Number	Description	Explosion Proof Housing	CSA	Ship Weight	Delivery
005236-001	Power supply assembly	X	X	8 lb (3.6 kg)	8 Weeks
005234-001	Replacement power supply board			2 lbs	8 Weeks

000604-012 Wall Mount Enclosure with 000507-006 Power Supply

Part Number	Housing	Ship Weight	Delivery
000604-012	Al, NEMA 1	6.5 lb (2.95 kg)	8 weeks

Mounting Cages: Q4003 and Q4004

Q4004 Universal Mounting Cage for use with 4U-height R8471 gas controllers.



Q4004
Universal Mounting Cage

Q4003 Universal Mounting Cage for use with 3U-height R8471 gas controllers.



Q4003
Universal Mounting Cage

Mounting Cages: Q4003 and Q4004

R8471 Mounting Cages

Part Number	OS Number	Blank Panel	Height	# of Cntrlrs	Ht Config	Ship Weight	Delivery
005269-001	Q4004A2019		7.0 in	16	4U	9.3 lb (4.2 kg)	4 weeks
005269-002	Q4004E2027		7.0 in	12	4U	7.6 lb (3.5 kg)	4 weeks
005269-003	Q4004B2011		7.0 in	8	4U	5.9 lb (2.7 kg)	4 weeks
005269-004	Q4004C2009		7.0 in	6	4U	5.1 lb (2.3 kg)	4 weeks
005269-005	Q4004D2007		7.0 in	4	4U	4.2 lb (1.9 kg)	4 weeks
005269-006	Q4004A2050		7.0 in	2	4U	3.1 lb (1.4 kg)	4 weeks
005496-001	4U Blank Plate	X	7.0 in		4U	0.2 lb (0.1 kg)	8 weeks
005269-007	Q4003U1019		5.25 in	16	3U	9.3 lb (4.2 kg)	8 weeks
005269-008	Q4003U1027		5.25 in	12	3U	7.6 lb (3.5 kg)	8 weeks
005269-009	Q4003U1011		5.25 in	8	3U	5.9 lb (2.7 kg)	8 weeks
005269-010	Q4003U1009		5.25 in	6	3U	5.1 lb (2.3 kg)	8 weeks
005269-011	Q4003U1007		5.25 in	4	3U	4.2 lb (1.9 kg)	8 weeks
005269-012	Q4003U1050		5.25 in	2	3U	3.1 lb (1.4 kg)	8 weeks
005269-901	Q40042019-R		7.0 in	16	4U	9.3 lb (4.2 kg)	4 weeks
005496-002	3U Blank Plate	X	5.25 in		3U	0.2 lb (0.1 kg)	8 weeks

(1) Q4004A2019-R has Russian approvals

Hop-Link Wireless Gas Detection System



Hop-Link Wireless Gas
Detection System

Hop-Link Wireless Gas Detection System delivers a supervised, wireless solution between the gas detector installed in the plant and the signal receiver usually located in a control room. Faster, easier and less expensive to install than any hardwired system — a typical system can be installed and commissioned in one day. 900Mhz frequency-hopping transmission provides a license-free, interference-free and trouble-free solution.

- Sealed aluminum transmitter assembly is Class 1, Division 2, CSA/NRTL, Federal Communication Commission (FCC) and ISC approved
 - DIN-rail mounted receiver module provides 4 to 20 mA and two dry relay contact signal outputs
 - Each transmitter/receiver pair is tested/shipped as a matched set. No switch setting or programming of the radio is required
 - Unique addressing ensures multiple systems can be installed in an area with out interference
 - Four to five mile transmit range using 1/4 wave omni antenna, 15 mile range using optional YAGI antenna
 - 24 VDC input power at 160 mA average consumption (not including gas detector)
 - License-free operation (Americas)
 - Compatible with all Det-Tronics gas detectors
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HopLink Wireless Gas Detection Package

Model*	HopLink Transmitter*				Hoplink Receiver		Shipping Weight (No Gas Detector Included)	Delivery
	Operating Voltage	Material and Threads	Includes Pre-fitted J-box	Gas Detector Compability	Operating Voltage	Mounting and Outputs		
DEC-WGS	24 vdc	Aluminum, 3/4" NPT	6-port aluminum, 3/4"NPT cable entries	Any detector with 4-20ma signal and/or 2 contact outputs	24 vdc	Din-rail mounted, (1) analog 4-20ma & (2) contacts	10.5 lb (4.8 kg)	8 weeks

* Includes standard omnidirectional antennae. Contact factory for long-range antennae pricing.

** Gas detector price not included