Smoke Detectors

DS230 Series Heat Detectors

DS230, DS230F and DS233F Heat Detectors

The DS230, DS230F and DS233F are Electronic Rate-of-Rise / Fixed Temperature Heat Detectors. They are designed to work with Detection Systems' MB series bases to provide general property protection. When properly installed using the MB2W/MB4W series bases, tamper protection is provided by IN/OUT wiring of the positive power line. This causes the control panel to initiate a trouble signal when a detector is removed from its base. Supervision of 2-wire systems is provided by the master control. For 4-wire systems, supervision is provided by an End-of-Line Power Supervision device such as an EOL200, or an MB4WE with its built-in EOL resistor .

Features

- Interchangeable 2-Wire and 4-Wire Bases
- 12 or 24 VDC Operation
- 135°F / 57°C Fixed-Temperature Heat Sensor (DS230F)
- 190°F / 88°C Fixed Temperature Sensor (DS233F)
- =15°F (9°C) per minute Rate-of-Rise (Model DS230)

International Certification

- UL Listed
- CSFM

Technical Data

Standby Voltage
2-wire: 8.5 to 33.0 VDC4-wire: 10.0 to 30.0 VDC
Maximum RMS Ripple
25% of DC input
Startup Current
120 µA max.
Standby Current
90 µA @ 12 VDC, 110 µA @ 24 VDC, 120 µA @ 33 VDC.
The MB4WE = 24 mA @ 12 and 24 VDC.
Alarm Current
2-wire: Dependent on control panel, but must be limited to 100 mA max.4-wire:
MB4W : 52 mA @ 12 VDC, 54 mA @ 24 VDC, 70 mA @ 30 VDC.
MB4WA: 58 mA @ 12 VDC, 62 mA @ 24 VDC, 75 mA @ 30 VDC.
MB4WE: 82 mA @ 12 VDC, 86 mA @ 24 VDC, 100 mA @ 30 VDC.
MB4WS: 52 mA @ 12 VDC, 54 mA @ 24 VDC, not including sounder current.
Operating Temperature
+32°F to +100°F (0°C to+38°C)
Rate-of-Rise
=15°F (9°C) per minute
Power-up Time
22 seconds max.
Compatible Control Panels
2-wire: See Tech Service Note P/N: 26979. 4-wire: Compatible with all UL Listed 4-wire control panels.
Ordering Information
DS230 for 135°F (57°C) Fixed Temperature/ Rate-of-Rise Detector
DS230F for 135°F (57°C) Fixed Temperature Only Detector
DS233F for 190°F (88°C) Fixed Temperature Only

Peripheral Accessories

EOL200

Supervision module for 4-wire bases

TP280

Trimplate for use with the MB2W

Bases

MB2W 2-wire
MB4W 4-wire
MB4WA 4-wire with Form "C" aux. relay
MB4WE 4-wire with EOL relay and Normally Closed aux. relay
MB4WS 4-wire with built-in sounder

DS240 Series Beam Smoke Detectors

DS240/DS241 Photobeam Smoke Detectors

The DS240 and DS241 are long range projected beam type smoke detectors which consist of a separate transmitter and receiver. Internal pointability provides coverage flexibility without the need for brackets. Automatic Signal Synchronization and Range Adjustment reduce installation costs. Selectable sensitivity and alarm response time provide installation flexibility.

Features

- Easy Bore Sight Alignment
- 30 ft. to 350 ft. / 10 m to 107 m Range
- 8 Sensitivity Levels
- Internal Vertical & Horizontal Pointability
- Automatic Signal Synchronization
- Automatic Environmental Compensation
- Automatic Range Adjustment

International Certification

- UL Listing S3019
- ULC Listing CS692
- MSFM Permit #1943
- NY City MEA Acceptance #MEA274-93-E
- CSFM #7260-1062:106
- FM Job #0X2A9.AY

Technical Data

POWER REQUIREMENTS
DS240
18 to 32 VDC
Receiver: 45 mA @ 24 VDC
Transmitter: 20 mA @ 24 VDC
DS241
10.2 to 15 VDC
Receiver: 50 mA @ 12 VDC
Transmitter: 20 mA @ 12 VDC
ALARM OUTPUT
One Normally Open contact rated 1 Amp, 60 VDC maximum for resistive loads. One Auxiliary Form “C“ contact rated 1 Amp, 60 VDC maximum for resistive loads.
TAMPER/TROUBLE OUTPUT
One Normally Closed contact rated 1 Amp, 60 VDC maximum for resistive loads and open when cover is removed, power is lost, or beam is blocked.
SIGNAL PROCESSING
Automatic Signal Synchronization eliminates the need for a synchronization wire. Self-compensating circuitry compensates for signal loss due to dust or dirt buildup on lens and signals a trouble condition upon signal loss of 50%.
OPERATION
The transmitter emits an invisible pulsed infrared beam to the receiver. If the beam is obscured beyond the selected threshold by smoke, the receiver signals an alarm. If the beam is completely blocked, the receiver signals a trouble.
ALARM RESPONSE SELECTIVITY
Eight (8) sensitivity settings are available. Selectable response time of 5 or 30 seconds.
STORAGE & OPERATING TEMPERATURE
-22° to +130°F / -30° to +55°C. For UL Certificated Installations +32° to 120°F / 0° to 50°C.
TEST FEATURES
Externally visible LEDs on transmitter and receiver give indication of signal, alarm, and supervision conditions. Signal voltage output on receiver assists in alignment and troubleshooting. DIS2000 Indicator Plate (included) provides LED indication of the detector’s status/condition, and provides a point to read/test the signal voltage.
DIMENSIONS
7" H., by 5.5" W., by 5.5" D. / 17.8 cm H., 13.9 cm W., 13.9 cm D.
COVERAGE
30 to 350 foot / 9 m to 107 m range, up to 60 foot / 18 m spacing on smooth, flat ceilings.
MOUNTING
Surface or ceiling mount to standard 4" / 10.2 cm square or octagonal electrical boxes.
PATTERN POINTABILITY
Internally pointable ±90° horizontal, ±10° vertical.
RADIO FREQUENCY INTERFERENCE (RFI) IMMUNITY
No alarm or setup on critical frequencies in the range from 26 to 950 Megahertz at 50 v/m.
ORDERING INFORMATION
DS240 for 24 volt operation
DS241 for 12 volt operation
DS240CAN for ULC installation, 24 volt operation
DS241CAN for ULC installation, 12 volt operation.

Peripheral Accessories

DIS2000
Indicator Plate included with the beam detector set

DIS240
Remote Test/Indicator Plate

TK240
Field Test Kit

AL240
Alignment Strobe

TC2000
Test Cord

DS250 Photoelectric Smoke Detector

DS250 Photoelectric Smoke Detector

The DS250 Series are low profile, Photoelectric System type smoke detectors. They incorporate a separate detector and base design that permits use with both 2-wire and 4-wire bases. The patented chamber design provides superior immunity to false alarms caused by dust. Chamber Check self diagnostics allow the sensitivity to be verified by simply looking at the detector LED.

Features

- Diagnostic/Sensitivity Test Features
- Chamber Check Self Diagnostics
- Field Replaceable Smoke Chamber
- Easy Disassembly for Cleaning
- Sensitivity Voltage Output
- Interchangeable 2-Wire and 4-Wire Bases
- 12 or 24 VDC Operation
- 135°F / 57°C Heat Sensor Option

International Certification

- UL Listed
- ULC Listed
- CSFM
- NYC MEA
- CE

Technical Data

POWER REQUIREMENTS
2-wire: 8.5 to 33VDC
4-wire: 10 to 30VDC
ALARM OUTPUT
Signal output is dependent on base selection.
STANDBY CURRENT
80µA @ 12VDC; 90µA @ 24VDC.
ALARM CURRENT
2-wire:
Dependent on control panel. Panel must limit the alarm current to 100mA maximum
4-wire:
MB4W: 48mA @ 12VDC; 24VDC
MB4WA: 56mA @ 12 & 24VDC
MB4WE: 80mA 12 & 24VDC
MB4WS: Smoke Detector: 48mA @ 12VDC, 51mA @ 24VDC Sounder: 15mA @ 12VDC, 25mA @ 24VDC
RADIO FREQUENCY INTERFERENCE (RFI) IMMUNITY
No alarm or setup on critical frequencies in the range of 26 to 950 Megahertz at 50v/m.
STORAGE & OPERATINGTEMPERATURE
+32°F to +120°F (0°C to 40°C) 0 to 95% relative humidity (non-condensing).
For UL Certificated Installations, +32°F to 100°F (0°C to 40°C).
TEST FEATURES
LED automatically flashes to indicate out of calibration level. Magnet operation/sensitivity test function meets NFPA 72 testing recommendations. Voltage output allows direct reading of the sensitivity level using a standard DVM.
ENCLOSURE DESIGN
High impact, fire retardant ABS plastic enclosure and separate twist-lock bases.
CHAMBER CHECK
This feature allows the detector to automatically indicate if its calibration is out of the factory listed range. This allows NFPA guidelines for sensitivity testing to be met by visually inspecting the detector and checking the flash rate of the LED. If the calibration is out of range for more than 36 hours, the alarm LED on the detector will begin to flash once per second. This is an indication that the detector needs to be cleaned following the instructions provided with the detector. The LED will flash once every 3 seconds when the detector is operating normally.
MOUNTING
Compatible with 2-wire or 4-wire bases. Bases can be mounted to 4 in. octagon, single gang, wiremold #5738 and 4 in. square boxes. NOTE: the MB2W base cannot mount to a 4 in. square box.
HEAT SENSOR TEMPERATURE
135°F (57°C) (DS250TH only).
ORDERING INFORMATION
To order, specify DS250 detector (requires a base) or DS250TH detector with 135°F (57°C) heat sensing thermistor (requires a base).
OPTIONAL ACCESSORIES
R**C4-10**
Replacement Smoke Chamber (shipped in packages of 10).
DT-1
Removal/Test Tool (provides a means of accessing the detector without the use of a ladder by connecting to ½ in. EMT or standard broom handle).
EOL200
End-of-Line Supervision Module for use with 4-wire systems.
TC2000
Test Cord.
TP280
Trim Plate for retrofit and remodeling purposes. 6 / in. (16.2 cm) diameter.

Peripheral Accessories

Base Description

MB2W

2-wire 5.5 in. (14 cm) base diameter

MB4W

4-wire Normally Open alarm contact output. Rated 10 watts, 0.5 Amps @ 100 Vdc. 6.375 in. (16.2 cm) base diameter

MB4WA

4-wire with aux. Relay. Normally Open alarm contact and a Form “C“ auxiliary contact. Contacts rated 62.5 VA, 0.5 A @ 125 Vac, 30 watts, 1.0 A @ 30 Vdc for resistive loads. 6.375 in. (16.2 cm) base diameter

MB4WE

4-wire with Normally Open aux. Relay and power supervision. Normally Open alarm contact and Normally Open auxiliary contact. Built-in Normally Closed power supervision relay opens on power loss. Contacts rated 62.5 VA, 0.5 A @ 125 Vac, 30 watts, 1.0 A @ 30 Vdc for resistive loads. 6.375 in. (16.2 cm) base diameter.

MB4WS

4-wire with externally powered 85 db sounder. Normally Open alarm contact. Rated 10 watts, 0.5 Amps @ 100 Vdc. Built-in sounder. 6.375 in. (16.2 cm) base diameter.

TP280

Trim Plate used with 2-wire bases to cover 6 in. (16.2 cm) holes. 6 in. (16.2 cm) base diameter.

EOL200

Supervision Module

RC4-10

Replacement Chamber

TC2000

Test Cord

DT-1

Test Removal Tool

DS260 Ion Smoke Detector

DS260 Ion Smoke Detector

The DS260 Series are low profile, Ionization System type smoke detectors. They incorporate a separate detector and base design that permits the same detector to be used with both 2-wire and 4-wire bases. A voltage output provides the ability to confirm proper calibration after installation.

Features

- Low Operating Current
- Interchangeable 2-Wire and 4-Wire Bases
- 12 or 24 VDC Operation

International Certification

- UL Listed

Technical Data

POWER REQUIREMENTS
2-wire:8.5 to 35 VDC
4-wire:10 to 32 VDC
ALARM OUTPUT
Signal output is designed on base selection.
STANDBY CURRENT
45 micro-amps @ 12 VDC; 60 micro-amps @ 24 VDC.
ALARM CURRENT
2-wire:
Dependent on control panel. Panel must limit the Alarm Current to 100 mA maximum.
4-wire:
MB4W
52 mA @ 12 VDC
54 mA @ 24 VDC
MB4WA
62 mA @ 12 VDC
58 mA @ 24 VDC
MB4WE
86 mA @ 12 VDC
82 mA @ 24 VDC
MB4WS
Smoke detector:48 mA @ 12 VDC
Sounder:15 mA @ 12 VDC, 25 mA @ 24 VDC
MAXIMUM RMS RIPPLE
25 percent of DC input.
RADIO FREQUENCY INTERFERENCE (RFI) IMMUNITY
No alarm or setup on critical frequencies in the range from 26 to 950 Megahertz at 50 v/m.
STORAGE & OPERATING TEMPERATURE
+32° to +100°F (0° to +38°C). 0 to 95% relative humidity (non-condensing).
TEST FEATURES
The detector operation is tested by placing a magnet next to the unit which activates an internal reed switch. A voltage output is also available, which allows verification of the calibration level.
ENCLOSURE DESIGN
High impact fire retardant ABS plastic enclosure and separate twist-lock bases.
MOUNTING
Compatible with 2-wire or 4-wire bases. All bases can be mounted to 4" octagon, single gang, wiremold #5738, and 4" square boxes. NOTE: The MB2W base cannot be mounted to a 4" square box.

Peripheral Accessories

Base Description

MB2W
2-wire 5.5 in. (14 cm) base diameter

MB4W
4-wire Normally Open alarm contact output. Rated 10 watts, 0.5 Amps @ 100 Vdc. 6.375 in. (16.2 cm) base diameter

MB4WA
4-wire with aux. Relay. Normally Open alarm contact and a Form “C“ auxiliary contact. Contacts rated 62.5 VA, 0.5 A @ 125 Vac, 30 watts, 1.0 A @ 30 Vdc for resistive loads. 6.375 in. (16.2 cm) base diameter

MB4WE
4-wire with Normally Open aux. Relay and power supervision. Normally Open alarm contact and Normally Open auxiliary contact. Built-in Normally Closed power supervision relay opens on power loss. Contacts rated 62.5 VA, 0.5 A @ 125 Vac, 30 watts, 1.0 A @ 30 Vdc for resistive loads. 6.375 in. (16.2 cm) base diameter.

MB4WS
4-wire with externally powered 85 db sounder. Normally Open alarm contact. Rated 10 watts, 0.5 Amps @ 100 Vdc. Built-in sounder. 6.375 in. (16.2 cm) base diameter.

TP280
Trim Plate used with 2-wire bases to cover 6 in. (16.2 cm) holes. 6 in. (16.2 cm) base diameter.

EOL200
Supervision Module

RC4-10
Replacement Chamber

TC2000
Test Cord

DT-1
Test Removal Tool

DS282 2-wire Photoelectric Smoke Detectors

DS282 2-wire Photoelectric Smoke Detector

The DS282 is a low profile, Photoelectric System type, 2-wire smoke detector. The patented chamber design provides superior immunity to false alarms caused by dust. Chamber Check self diagnostics allow the sensitivity to be verified by simply looking at the detector LED. Several different models are available, offering a wide variety of features and outputs.

Features

- Direct Wire Design with Removable Terminal Strip
- Diagnostic/Sensitivity Test Features
- Chamber Check Self Diagnostics
- Field Replaceable Smoke Chamber
- Easy Disassembly for Cleaning
- Sensitivity Voltage Output
- 12 or 24 VDC Operation
- 135°F / 57°C Heat Sensor Option

Scope of Supply of Basic Version

DS282
2-wire smoke detector.
DS282TH
2-wire smoke detector with 135°F (57°C) heat sensor.
DS282THS
2-wire smoke detector with 135°F (57°C) heat sensor and an 85 db sounder.
DS282THC
2-wire smoke detector with 135°F (57°C) heat sensor and an auxilliary relay.

International Certification

- UL Listed
- CSFM

Technical Data

POWER REQUIREMENTS
2-wire: 8.5 to 33VDC
RELAY CONTACTS
Form "C": Auxiliary Contact, 1A, 220VDC, 250VAC (Normally Open/Closed/Normally Closed).
RADIO FREQUENCY INTERFERENCE (RFI) IMMUNITY
No alarm or setup on critical frequencies in the range of 26 to 950 Megahertz at 50v/m.
STORAGE & OPERATING TEMPERATURE
+32°F to +120°F (0°C to 40°C) 0 to 95% relative humidity (non-condensing).
TEST FEATURES
LED automatically flashes to indicate a calibration trouble and latches on alarm. Sensitivity can be verified using visual check, magnet test or digital volt meter.
CHAMBER CHECK
The Chamber Check automatic sensitivity feature provides an indication if the detector is outside the factory calibrated specifications. This feature reduces service costs because the installer can easily determine which detectors require attention. This feature also reduces false alarms by alerting the end-user that the detector is dirty long before the possibility of producing a false alarm. A visual indication is provided in all DS smoke detectors.
PATENTED CHAMBER DESIGN
The detection chamber includes computer designed chamber walls and lenses to optimize internal light scattering and dust hiding capabilities. This provides for industry leading dust immunity without sacrificing detection. The detection chamber can be easily removed should it require cleaning, and is field replaceable. Replacement chambers are available in packs of ten (10).
SOUNDER
85db sounder activates on detector alarm or reverse polarity. Available on detectors with "S" in model number.
ENCLOSURE DESIGN
High impact, fire retardant ABS plastic enclosure and separate twist-lock mounting plate. The DS282 detectors measure 2 in. (5 cm) High by 5 in. (12.7 cm) in Diameter.
MOUNTING
Separate mounting plate mounts directly to 4-inch octagonal electrical box, single gang box and wiremold surface box #5738. A removable terminal strip allows for quick installation.
HEAT SENSOR TEMPERATURE
135°F (57°C).

Peripheral Accessories

RC4-10
Replacement Chamber

EOL200
End-of-Line Supervision Module

TC2000
Test Cord

DT1
Removal/Test Tool (suitable for testing only, not for installation/removal

TP280
Trim Plate for retrofit and remodeling purposes. 6 in. (16.2 cm) diameter.

DS284 4-wire Photoelectric Smoke Detectors

DS284 4-wire Photoelectric Smoke Detector

The DS284 is a low profile, Photoelectric System type, 4-wire smoke detector. The patented chamber design provides superior immunity to false alarms caused by dust. Chamber Check self diagnostics allow the sensitivity to be verified by simply looking at the detector LED. Several different models are available, offering a wide variety of features and outputs.

Features

- Direct Wire Design with Removable Terminal Strip
- Diagnostic/Sensitivity Test Features
- Chamber Check Self Diagnostics
- Field Replaceable Smoke Chamber
- Easy Disassembly for Cleaning
- Sensitivity Voltage Output
- 12 or 24 VDC Operation
- 135°F / 57°C Heat Sensor Option

Scope of Supply of Basic Version

DS284
4-wire smoke detector.
DS284TH
4-wire smoke detector with a 135°F (57°C) heat detector.
DS284THS
4-wire smoke detector with a 135°F (57°C) heat detector and a 85 db sounder.
DS284THR
4-wire smoke detector with a 135°F (57°C) heat detector and a trouble relay.
DS284THSR
4-wire smoke detector with a 135°F (57°C) heat detector, a85 db sounder and a trouble relay.
DS284THCS
4-wire smoke detector with a 135°F (57°C) heat detector, a85 db sounder and a auxilliary relay.
DS284THC
4-wire smoke detector with a 135°F (57°C) heat detector and a auxilliary relay.
DS284THE
4-wire smoke detector with a 135°F (57°C) heat detector and a end-of-line relay.
DS284ES
4-wire smoke detector with a end-of-line relay and a 85 db sounder.
DS284IS4-wire smoke detector with a 135°F (57°C) isolated heat detector and a 85 db sounder.
DS284THES
4-wire smoke detector with a 135°F (57°C) heat detector, a end-of-line relay and an 85 db sounder.

International Certification

- UL Listed
- CSFM

Technical Data

POWER REQUIREMENTS
4-wire:10 to 30VDC
RELAY CONTACTS
Form “A“: Alarm and Trouble Relay Contacts, 0.5A, 200V (Normally Open). Form “C“: Auxiliary Contact, 1A, 220VDC, 250VAC (Normally Open/Closed/Normally Closed).
RADIO FREQUENCY INTERFERENCE (RFI) IMMUNITY
No alarm or setup on critical frequencies in the range of 26 to 950 Megahertz at 50v/m.
STORAGE & OPERATING TEMPERATURE
+32°F to +120°F (0°C to 40°C) 0 to 95% relative humidity (non-condensing).
TEST FEATURES
LED automatically flashes to indicate a calibration trouble and latches on alarm. Sensitivity can be verified using visual check, magnet test or digital volt meter.
CHAMBER CHECK
The Chamber Check automatic sensitivity feature provides an indication if the detector is outside the factory calibrated specifications. This feature reduces service costs because the installer can easily determine which detectors require attention. This feature also reduces false alarms by alerting the end-user that the detector is dirty long before the possibility of producing a false alarm. A visual indication is provided in all DS smoke detectors. The DS284THR and DS284THSR include a trouble relay, allowing this indication to send a report to the central station.
PATENTED CHAMBER DESIGN
The detection chamber includes computer designed chamber walls and lenses to optimize internal light scattering and dust hiding capabilities. This provides for industry leading dust immunity without sacrificing detection. The detection chamber can be easily removed should it require cleaning, and is field replaceable. Replacement chambers are available in packs of ten (10).
SOUNDER
85db sounder activates on detector alarm or reverse polarity. Available on detectors with “S“ in model number.
TROUBLE RELAY
Indicates Chamber Check trouble condition or loss of power (DS284THR and DS284THSR only).
ENCLOSURE DESIGN
High impact, fire retardant ABS plastic enclosure and separate twist-lock mounting plate. The DS284 detectors measure 2 in. (5 cm) High by 5 in. (12.7 cm) in Diameter.
MOUNTING
Separate mounting plate mounts directly to 4-inch octagonal electrical box, single gang box and wiremold surface box #5738. A removable terminal strip allows for quick installation.
HEAT SENSOR TEMPERATURE
135°F (57°C).

Peripheral Accessories

RC4-10
Replacement Chamber

EOL200
End-of-Line Supervision Module

TC2000
Test Cord

DT1
Removal/Test Tool (suitable for testing only, not for installation/removal

TP280
Trim Plate for retrofit and remodeling purposes. 6 in. (16.2 cm) diameter.

MX250 Multiplex Photoelectric Smoke Detectors

MX280/MX280TH Multiplex Photoelectric Smoke Detectors

The MX250 Series are low profile, Photoelectric System type smoke detectors for the DS7400 Series Multiplex Control/Communicators and the DS9400 Series Fire Alarm Control/Communicators. The patented chamber design provides superior immunity to false alarms caused by dust. The detector is designed for use with commercial and household fire warning systems. An LED indicator flashes to verify that the detector has power and the smoke sampling circuitry is functioning.

Features

- Connects to a two-wire Multiplex Bus
- Superior Dust Immunity
- Exclusive Chamber Check Self Diagnostics
- Automatic Sensitivity Test Features
- 135°F (57°C) Heat Sensor (MX250TH)
- Field Replaceable Smoke Chamber
- Easy Disassembly for Cleaning

International Certification

- UL
- ULC
- CSFM

Technical Data

CONTROL PANEL REQUIREMENTS
DS7400(X) or DS7400Xi Control/Communicator with a DS7430 or DS7436 Multiplex Expansion Module. The DS7400(X) requires ROM version 3.07 or higher. The DS9400 Series requires the use of a DS9431 Multiplex Expansion Module and ROM version 2.0 or higher.
POWER REQUIREMENTS
Uses power from the multiplex bus. 500 µA nominal, 560 µA maximum in alarm.
CHAMBER CHECK SELF DIAGNOSTICS
The Chamber Check automatic sensitivity test feature provides an indication if the detector is outside the factory calibrated specifications. This feature reduces service costs because the installer can easily determine which detectors require attention. This feature also reduces false alarms by alerting the end user that the detector is dirty, long before the possibility of producing a false alarm. A unique Chamber Check signal is provided."
PATENTED CHAMBER DESIGN
The detection chamber includes computer designed chamber walls and lenses to optimize internal light scattering and dust hiding capabilities. This provides for industry leading dust immunity without sacrificing detection. The detection chamber can be easily removed should it require cleaning and is field replaceable. Replacement chambers are available in packs of ten (10).
OPERATING TEMPERATURE RANGE
+32° to +100°F (0° to +38°C)
RADIO FREQUENCY INTERFERENCE (RFI) IMMUNITY
No alarm or setup on critical frequencies in the range of 26 to 950 Megahertz at 50 v/m.
TEST FEATURES
LED automatically flashes to indicate calibration trouble condition. A steady LED indicates an alarm condition. Sensitivity can be verified by a magnet test.
ENCLOSURE DESIGN
High impact, fire retardant ABS plastic enclosure and separate twist-lock mounting plate.
MOUNTING
Ceiling or wall mount.
HEAT SENSOR
MX250 no heat sensor.
MX250TH +135°F (57°C) high temperature.

Peripheral Accessories

Base Description

AFB2W
2-wire 5.5 in. (14 cm) base diameter
Supervision Module

RC4-10
Replacement Chamber

TC2000
Test Cord

DT-1
Test Removal Tool

MX280 Series Multiplex Photoelectric Smoke Detectors

MX280/MX280TH Multiplex Photoelectric Smoke Detectors

The MX280 Series are low profile, Photoelectric System type smoke detectors for the DS7400 Series Multiplex Control/Communicators and the DS9400 Series Fire Alarm Control/Communicators. The patented chamber design provides superior immunity to false alarms caused by dust. The detector is designed for use with commercial and household fire warning systems. An LED indicator flashes to verify that the detector has power and the smoke sampling circuitry is functioning.

Features

- Connects to a two-wire Multiplex Bus
- Superior Dust Immunity
- Exclusive Chamber Check Self Diagnostics
- Automatic Sensitivity Test Features
- 135°F (57°C) Heat Sensor (MX280TH)
- Field Replaceable Smoke Chamber
- Easy Disassembly for Cleaning

International Certification

- UL
- ULC
- CSFM

Technical Data

CONTROL PANEL REQUIREMENTS
DS7400(X) or DS7400Xi Control/Communicator with a DS7430 or DS7436 Multiplex Expansion Module. The DS7400(X) requires ROM version 3.07 or higher. The DS9400 Series requires the use of a DS9431 Multiplex Expansion Module and ROM version 2.0 or higher.
POWER REQUIREMENTS
Uses power from the multiplex bus. 500 µA nominal, 560 µA maximum in alarm.
CHAMBER CHECK SELF DIAGNOSTICS
The Chamber Check automatic sensitivity test feature provides an indication if the detector is outside the factory calibrated specifications. This feature reduces service costs because the installer can easily determine which detectors require attention. This feature also reduces false alarms by alerting the end user that the detector is dirty, long before the possibility of producing a false alarm. A unique Chamber Check signal is provided."
PATENTED CHAMBER DESIGN
The detection chamber includes computer designed chamber walls and lenses to optimize internal light scattering and dust hiding capabilities. This provides for industry leading dust immunity without sacrificing detection. The detection chamber can be easily removed should it require cleaning and is field replaceable. Replacement chambers are available in packs of ten (10).
OPERATING TEMPERATURE RANGE
+32° to +100°F (0° to +38°C)
RADIO FREQUENCY INTERFERENCE (RFI) IMMUNITY
No alarm or setup on critical frequencies in the range of 26 to 950 Megahertz at 50 v/m.
TEST FEATURES
LED automatically flashes to indicate calibration trouble condition. A steady LED indicates an alarm condition. Sensitivity can be verified by a magnet test.
ENCLOSURE DESIGN
High impact, fire retardant ABS plastic enclosure and separate twist-lock mounting plate. The MX280 detector measures 2.0 in. (5.0 cm) High x 5.0 in. (12.7 cm) in Diameter.
MOUNTING
Ceiling or wall mount.
HEAT SENSOR
MX280 no heat sensor.
MX280TH +135°F (57°C) high temperature.

Peripheral Accessories

RC4-10

Replacement chamber* (*Shipped in packages of 10)

DT1

Removal tool.