



JFS-IP4000

ADDRESSABLE FIRE CONTROL PANEL



P/N 97679

Features

- 4,064 addresses available on this analog addressable system
- Additional system capacity achieved via multi-point SLC modules
- 1500 software zones
- NFPA 72 Compliant Smoke Sensitivity Test Built-In
- System Operates as Class A or Class B for SLC, P-Link and NACs
- 10 Amp Power Supply, Expandable to 315 amps
- 6 NACS, Regulated, Rated at 3 Amps each, expandable to 192
- 4 Input/Output (I/O) Circuits for system flexibility rated at 1 Amp each, ideal for manual release and abort
- Strobe Synchronization and System Wide Sync for Potter/AMSECO®, Gentex®, Cooper Wheelock® and System Sensor® strobes
- Dedicated Alarm, Supervisory and Trouble Relays
- 4,000 Event History Buffer
- Cabinet will house up to 18 AH batteries
- Optional two line DACT with UD-1000 that can report General, Zone or Point Information
- Built in IP communicator
- Ethernet Port for Programming and Network Connectivity
- E-Mail System Status, Reports and Event Information

Description

The JFS-IP4000 is an expandable analog/addressable releasing fire alarm system with a total system capacity of 4,064 addresses. Additional capacity on the system is achieved using multi-point SLC modules. The control panel utilizes the exclusive Potter protocol that includes a complete line of sensors and modules. The system is expandable with a total of thirty-one additional addressable Signaling Line Circuits (SLC) each with a maximum of 127 devices. Each SLC may be comprised of any combination of smoke sensor, heat detectors or modules and allows for a total of 50 ohms of impedance and may use any wire compliant with the National Electrical Code (NEC).

The JFS-IP4000 has a 10 Amp power supply with six Notification Appliance Circuits (NACs) and four Input/Output (I/O) circuits. The NACs are rated at 3 Amps each and the I/Os are rated at 1 Amp each. Each output is regulated and power limited. In addition, each output is uniquely programmable and may be configured for steady signal, strobe synchronization, constant power, door holder power, or releasing. The strobe synchronization includes Potter/AMSECO, Gentex, System Sensor and Cooper/Wheelock and with the exclusive Quadrasync each output may have a unique brand and all strobes will flash together. The I/Os are designed for inputs such as manual release stations and abort switches that will not require polling and react nearly instantaneously.

The JFS-IP4000 is listed for releasing of fire suppression systems. The software allows cross zones, counting zones, and timers for suppression. The system is capable of multiple release outputs across multiple hazards. In addition, the JFS-PS1000 may be used to extend releasing capability. The NACs may be expanded using the JFS-PS1000 series intelligent power supplies. Each JFS-PS1000 adds another 10 Amps of power, 2 additional input circuits and the JFS-IP4000 will support up to 31 power supplies. The system will synchronize the strobes system wide. In addition, the JFS-PS1000E has space to allow the installation of up to six PAD100-SLCE SLC loop expansion cards. The cards mount on a stacker bracket that allows access to all SLC circuit connections.



Specifications	
Dimensions	18 15/16"W x 27 5/16"H x 4 7/16"D
AC Mains	5.0 Amps @ 120 VAC 50/60 HZ 3.0 Amps @ 240 VAC 50/60 HZ
Enclosure	16 gauge cold rolled steel with removable locked door with Lexan viewing window
Battery	Standby Current-130 mA Alarm Current-200 mA <ul style="list-style-type: none"> • 10 Amps power for NACs, I/O, and P-Link • 3 Amps per NAC, regulated • 1 Amp per I/O circuit, regulated • Battery Charger range 8-55 Ah • Battery Charger voltage 27.3 VDC • P-Link maximum current of 1 Amp
Temperature and Humidity Range	32° to 120° (0°C to 49°C) with a maximum humidity of 93% non-condensing.
Standards	<ul style="list-style-type: none"> • NFPA 12, 12A, 13, 15, 16, 17, 17A, 70, 72, 750, and 2001 • ANSI/UL 864 - Local (L), Remote Station (RS), Central Station (CS), Propriety (PPU), Auxiliary (AUX). Type of Service: Automatic (A), Manual (M), Water flow (WF) Sprinkler Supervisory (SS) Type of Signaling: Digital Alarm Communicator (DAC), March Time (March), Non Coded (NC), Reverse Polarity (Rev Pol), Other Technologies (OT) • IBC 2000, 2003, 2006, 2009, 2012

SLC Loop Accessories

The control panel may be connected with up to 4,064 addressable devices or modules in any combination. The SLC is not restricted by any special wire requirements and may be wired with any wire that complies with the NEC.

SLC Features

The Potter protocol is a digital protocol with a proven design for reliability and noise immunity. The system does not require special cable or conductors for connection of the Signaling Line Circuit as long as the cable is compliant with NFPA 70 and NFPA 72. The system allows for Class A or Class B installations as well as "T-Taps." Each loop is capable of 127 points, with a max wiring distance of 10,000 ft.

SLC Loop Devices	
Device	Description
PAD100-PD	Analog Photo Electric Smoke Detector is a smoke detector with a listed obscuration of 1.02 to 3.83 percent per foot.
PAD100-PHD	Combination Analog Photo Electric Smoke/Heat Detector – a smoke detector with a listed obscuration of 1.02 to 3.83 percent obscuration and a fixed temperature 135° Fahrenheit heat detector.
PAD100-HD	Analog Fixed Temperature Heat Detector that is selectable from 135°F to 185°F.
PAD100-DUCTR	Addressable Duct Smoke Detector with Form C Relay.
PAD100-DUCT	Addressable Duct Smoke Detector.
PAD100-6B	6" round base that is mounted to an electrical box and wired for connection of one of the above sensors.
PAD100-4B	4" round base that may be mounted to an electrical box and wired for connection to the above sensors.
PAD100-IB	Isolator base that interrupts a short in a SLC and prevents the short from affecting protected devices on the loop.
PAD100-RB	Addressable Relay Base that contains one relay controlled by the SLC. Relay is rated at rated at 2 amps at 30 VDC or 0.5A at 125VAC.
PAD100-SB	Addressable Sounder Base that contains an addressable sounder module that may be configured for local, group and all call.
PAD100-CD	Addressable CO gas detector.
PAD100-DD	Addressable photo electric smoke detector for use in DUCT/DUCTR enclosure.



User Interface

The fire alarm control panel has a 4 x 40 LCD display to provide information to the system status. The keypad has navigation keys to allow manipulation of the Menu on board the panel. The panel is shipped standard with the following LEDs:

- AC Power - Green • Alarm - Red • Earth Fault - Amber • Supervisory - Amber
- Silenced - Amber • Trouble - Amber • Pre-Release - Amber • Release - Red

The common buttons include a Silence, Reset, Acknowledge, and Drill. All of the buttons are accessible once the locked door is opened.

Ethernet/I.P. Connection

The JFS-IP4000 is shipped standard with an Ethernet connection. This connection is the programming port and may be connected to a building Wide Area Network (WAN) or Local Area Network (LAN). Once connected to the Internet, the panel may be selectively programmed to e-mail alarm conditions, trouble conditions, supervisory conditions, test, Event History and detector status. An e-mail may be sent to the panel and the panel will e-mail the event history, detector status, configuration file or server status to an authorized E-mail account. In addition, reminders may be set to send an e-mail for service, testing or other conditions.

In addition, the Ethernet connection is UL listed as an IP communicator. The IP communicator is listed to report to the UL listed Sur-Gard III IP receiver. The IP communicator replaces the traditional less reliable alarm communicator transmitter that utilized telephone lines. The IP communicator is an active method of connection and communication to the monitoring station.

P-Link

The JFS-IP4000 has a proprietary communication protocol that communicates through a RS-485 connection to field devices. Up to 64 devices may be connected to a single P-Link connection. The P-Link includes the communication terminals and regulated 24 VDC connection for the field devices. The field devices may be any of the following:

P-Link Devices	
Device	Description
PAD100-SLCE	Analog/Addressable loop expansion module (maximum of 31 per JFS-IP4000)
JFS-ANN1	2 x 16 LCD annunciator with a key pad in a locked metal enclosure.
JFS-ANN2	4 x 40 LCD annunciator with a key pad in a locked metal enclosure. Flush mount version available.
LED-16(F)	16 LED annunciator with common indicators in a locked metal enclosure. Flush mount version available.
JFS-PS1000(E)	10 amp, remote intelligent power supply with 6 NACs, 2 I/Os and a P-Link repeater. This panel is listed in conjunction with the JFS-IP4000 as releasing circuits.
CA-6500	Class A convertor that converts the SLC, NACs and P-Link connection
UD-1000	UL listed, Dual line telephone alarm communicator
DRV-50	LED driver expander, used to connect up to 50 LEDs in a graphic display
FCB-1000	Fire communication bridge, provides remote mounting of the Ethernet connection
FIB-1000	Fiber interface module, used to extend P-Link to multimode fiber (2 required)
RLY-5	Relay module, provides 5 form C relay contacts rated at 3.0 amps 24VDC/125AC
SPG-1000	Serial parallel gateway, allows for the connection to a serial or parallel printer
MC-1000	Multi-Connect allows up to sixty-three IP series panels to share a single reporting technology.
AE-2	Two card expansion cabinet
AE-8	Eight card expansion cabinet
AE-14	Fourteen card expansion cabinet

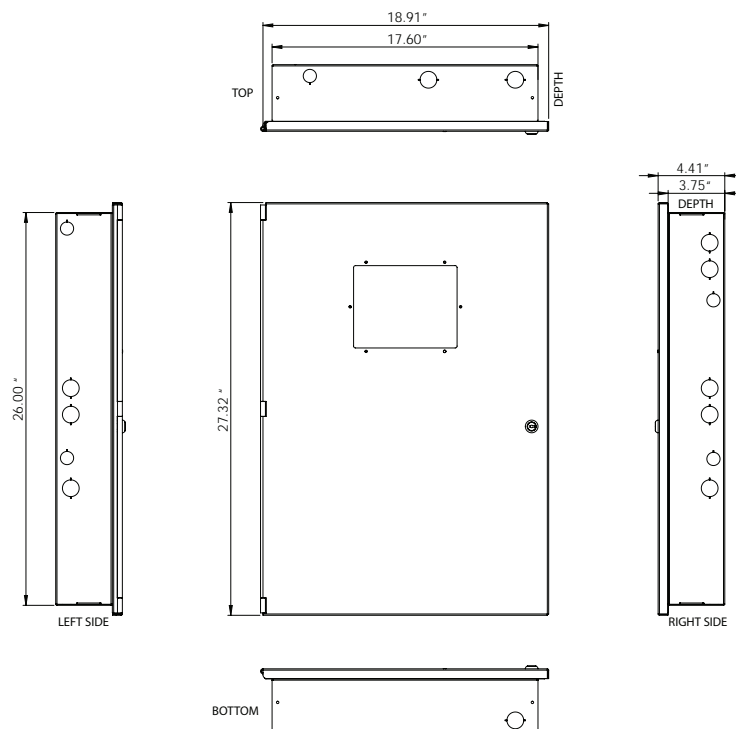


Sensor Features

The sensors through the fire alarm control panel provide a real time status as to the condition of the system. The smoke detector sensitivity, heat detector temperature level and drift compensation are all programmable options. The system also allows for a day/night mode where the panel automatically adjusts the sensitivity depending on the time of day. To assist in the reduction of false alarms, the smoke detectors also have a maintenance warning that sends a trouble signal when a detector is dirty to the point that it can no longer maintain the programmed sensitivity.

Modules	
Device	Description
PAD100-MIM	Micro Input Module provides a small foot print contact module for mounting inside an enclosure.
PAD100-PSSA	Single Action Addressable Pull Station.
PAD100-PSDA	Dual Action Addressable Pull Station.
PAD100-SIM	Single Input Module is a standard contact module with an LED that mounts into a 4" square electrical box.
PAD100-DIM	Dual Input Module is a device that can monitor two distinct inputs with a single device or in a Class A mode.
PAD100-TRTI	Two Relay Two Input module provides two form C relays that are individually controlled by the control panel. Each relay is rated for 2 amps at 30VDC or 0.5 amps at 125VAC. Also provides two contact inputs.
PAD100-NAC	Notification Appliance Circuit module is an addressable remote appliance circuit controlled by the panel.
PAD100-ZM	Zone Module is used to connect conventional 2-wire smoke detectors to the system.
PAD100-IM	Module interrupts a short on the SLC and prevents the short from affecting protected devices on the loop.
PAD100-RM	Relay Module that provides one form C relay controlled by the control panel. Relay is rated for 2 amps at 30VDC or 0.5 amps at 125VAC.
PAD100-LED	Module provides a single addressable LED that is controlled by the control panel.
PAD100-SM	Speaker Module provides switching for two audio channels.
PAD100-LEDK	Addressable LED and key switch that mounts in a single gang box.
PAD100-DRTS	DUCTR Remote Test Switch that mounts in a single gang box.
PAD100-OROI	One Relay One Input Module provides one form C relay and one input. The relay is rated at 2 amps at 30VDC or 0.5 amps at 125VAC.

Dimensions





Ordering Information

Model Number	Description	P/N
JFS-IP4000	Addressable Releasing Control Panel	97679
BT-80	Battery, 12V 8AH (2 Req'd)	18641
BT-120 ¹	Battery, 12V 12AH (2 Req'd)	18642 ¹
BT-180	Battery, 12V 18AH (2 Req'd)	18643
BT-260	Battery, 12V 26AH (2 Req'd)	18644
EOLD 3005012 ²	EOL Resistor/Diode Assembly for Releasing Circuit	18712 ²

¹ JFS-IP Series cabinets will not hold 12 AH batteries. Janus recommends using 18 AH batteries when 12 AH are required.

² For releasing use, EOLD 3005012 must be ordered separately.

Spare Components

Model Number	Description	P/N
n/a	Spare CPU, JFS-IP60	97604
n/a	EOL Resistor, 5.1K	99950

P-Link Devices

Model Number	Description	P/N
PAD100-SLCE	Analog/Addressable Loop Expansion Module	97652
JFS-ANN1	LCD Remote Annunciator	99247
JFS-ANN2	LCD Remote Annunciator	98725
LED-16	16 LED Annunciator	97644
LED-16F	16 LED Annunciator (Flush model)	97645
JFS-PS1000	Remote Intelligent Power Supply	98802
JFS-PS1000E	Remote Intelligent Power Supply (room for 6 Expansion Cards)	98728
CA-6500	Class A Expander Module	98730
UD-1000	Digital Alarm Communicator Transmitter	98729
DRV-50	LED Driver Module	98529
FCB-1000	Fire Communication Bridge	98528
FIB-1000	Fiber Interface Bridge	98527
RLY-5	Relay Expander Module	98526
SPG-1000	Serial Parallel Gateway	98525
MC-1000	Multi-Connect	97651
AE-2	Two Card Expansion Cabinet	97647
AE-8	Eight Card Expansion Cabinet	98622
AE-14	Fourteen Card Expansion Cabinet	98621



Modules		
Model Number	Description	P/N
PAD100-MIM	Miniature Input Module	97666
PAD100-PSSA	Single Action Addressable Pull Station	97654
PAD100-PSDA	Dual Action Addressable Pull Station	97655
PAD100-SIM	Single Input Module	97662
PAD100-DIM	Dual Input Module	97663
PAD100-TRTI	Two Relay Two Input Module	97665
PAD100-NAC	Notification Appliance Circuit	97659
PAD100-ZM	Zone Module	97660
PAD100-IM	Isolater Module	97658
PAD100-RM	Relay Module	97661
PAD100-LED	LED Module	97656
PAD100-SM	Speaker Module	97653
PAD100-LEDK	LED and Key Switch	97657
PAD100-DRTS	DUCTR Remote Test Switch	97678
PAD100-OROI	One Relay One Input Module	97664
SLC Loop Devices		
PAD100-PD	Analog Photoelectric Smoke Detector	97670
PAD100-PHD	Combination Analog Photoelectric Smoke/Heat Detector	97669
PAD100-HD	Analog Fixed Temperature Heat Detector	97668
PAD100-DUCTR	Addressable Duct Smoke Detector with Form C Relay	97677
PAD100-DUCT	Addressable Duct Smoke Detector	97676
PAD100-6B	6" Analog Smoke Detector Base	97671
PAD100-4B	4" Analog Smoke Detector Base	97672
PAD100-IB	Addressable Isolator Base	97673
PAD100-RB	Addressable Relay Base	97675
PAD100-SB	Addressable Sounder Base	97674
PAD100-CD	Addressable CO Gas Detector	97667

Note: Approvals/Listings maintained by and manufactured by Potter Electric Signal Company.

The seller makes no warranties, express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, except as expressly stated in the seller's sales contract or sales acknowledgment form. Every attempt is made to keep our product information up-to-date and accurate. All specific applications cannot be covered, nor can all requirements be anticipated. All specifications are subject to change without notice.



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