



# JANUS

FIRE SYSTEMS®

ENGINEERED  
FIRE PROTECTION  
SYSTEMS  
AND SOLUTIONS



INTEGRATED SPECIAL HAZARD  
SUPPRESSION SYSTEMS

3M™ NOVEC™ 1230  
FIRE PROTECTION FLUID

FM-200® FIRE SUPPRESSION

LOW & HIGH PRESSURE CO<sub>2</sub>

ENGINEERED DRY CHEMICAL

ALARM AND DETECTION

PROTECTING PEOPLE, ASSETS AND THE ENVIRONMENT

WHEN DOWNTIME ISN'T AN OPTION . . . JANUS FIRE SYSTEMS HAS THE SOLUTIONS.

## CLEAN AGENT FIRE EXTINGUISHING SYSTEMS

- Safe for human occupancy.
- Zero Ozone Depletion Potential (ODP)
- Discharge in 10 seconds or less to extinguish fires rapidly, minimizing damage to high value assets.
- Sv, Mv or Lv clean agent cylinders and accessories to protect any hazard configuration.
- Design in accordance with NFPA 2001.
- UL listed and FM approved.
- Janus Design Suite® software licensed to trained Janus Fire Systems distributors to create system proposals and hydraulically calculate piping network.



## 3M™ Novec™ 1230 Fire Protection Fluid

Engineered to be a safe and effective, waterless fire suppression agent, offering an environmental profile suited for modern green initiatives and environmental concerns. Novec 1230 fluid has an atmospheric lifetime of only 0.014 years. The Global Warming Potential (GWP) for all practical purposes is negligible.

Janus Fire Systems Novec 1230 systems are available in 360 psi (24.8 BAR) or 500 psi (34.5 BAR).

*\*3m and Novec are trademarks of 3M Company*

## FM-200® Fire Suppression Systems

Used in over one hundred thousand applications in more than 70 nations, FM-200® provides waterless fire suppression without leaving behind residue or particulate.

The FM-200® agent is stored as a liquid in cylinder assemblies designed specifically for the application and charged to a fill density of between 35 lb/ft<sup>3</sup> (561 kg/m<sup>3</sup>) and 70 lb/ft<sup>3</sup> (1121 kg/m<sup>3</sup>).

*\*FM-200® is a registered trademark of the Chemours Company.*

## ENGINEERED DRY CHEMICAL

Utilizes a stored pressure concept for hazards beyond the capabilities of pre-engineered dry chemical systems. It provides extremely high dry chemical flow rates for fires which are difficult to attack and extinguish. The agent is stored in welded seam cylinders fitted with quick acting discharge valves. Piping is configured using the Janus Design Suite® software to deliver the required quantity of dry chemical to the hazard area.







## CARBON DIOXIDE FIRE SUPPRESSION SYSTEMS

- System designs in accordance with NFPA 12.
- Complete product offering including lockout and selector valves.
- Pneumatic time delay and sirens.
- Nozzles for total flooding and local application.
- CO<sub>2</sub> vapor inerting systems.
- UL listed and FM approved.
- Janus Design Suite® software licensed to trained Janus Fire Systems distributors to create system proposals and hydraulically calculate piping network.

## ALARM AND DETECTION

A fire alarm control panel along with associated alarm and detection devices (e.g. smoke detectors, horns and strobes) complete a special hazard fire protection system regardless of



the suppression agent. These components operate in conjunction to detect fire threats early, activate the releasing system when appropriate, and notify occupants or workers of the situation.

## Low Pressure CO<sub>2</sub>

Janus Fire Systems® Low Pressure Carbon Dioxide Refrigerated Storage Units consist of an insulated pressure vessel fabricated to ASME standards. Storage tank capacities range from 2 to 38 tons and are available in horizontal and vertical orientations.

The storage tank has an integrated refrigeration system that utilizes CFC-free R-404A refrigerant. A pressure switch monitors the internal pressure of the tank and controls the refrigeration compressor. The optimal internal pressure is 300 psi (20.7 bar). Refrigeration power supplies to match local requirements.

## High Pressure CO<sub>2</sub>

HPCO<sub>2</sub> Fire Extinguishing System utilizes highly pressurized carbon dioxide as the extinguishing medium. Carbon dioxide (CO<sub>2</sub>) is a dry, inert, non-corrosive fire suppression agent perfectly suited to protect high value assets in normally unoccupied areas when an electrically non-conductive agent is required and where clean-up of other agents is problematic.

The CO<sub>2</sub> agent is stored as a liquid in 50 lb (22 kg), 75 lb (34 kg), or 100 lb (45 kg) cylinder assemblies, which can be used individually or manifolded together. The gas is released into the piping distribution system upon system actuation.





# JANUS FIRE SYSTEMS

Janus Fire Systems is a company built on the ideology of excellence, quality and innovation. We are committed to the safety and well being of our employees, a personalized relationship with our clients, and providing high quality Special Hazard Fire Protection products and services.

## EXPERIENCE

DEDICATED STAFF OF FIRE AND POWER EXPERTS READY TO ADDRESS OUR CUSTOMERS' NEEDS.

## INTEGRITY

SUPERIOR QUALITY PRODUCTS AND MANUFACTURING EXPERTISE, COMPLEMENTED BY INNOVATIVE DESIGN AND PROJECT MANAGEMENT SERVICES.

## CAPABILITIES

A FULL RANGE OF FIRE PROTECTION, SUPPRESSION AND DETECTION SYSTEMS MEETING EACH INDUSTRY'S SPECIFIC NEEDS.

Producing UL Listed and Factory Mutual Approved High Quality Products, Manufactured in an ISO-9001 certified facility.



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# JANUS

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FIRE PROTECTION  
SYSTEMS  
AND SOLUTIONS

## FIRE ALARM CONTROL PLATFORMS

JFS-IP60, JFS-IP127, JFS-IP4000

Flexible Panels

Tailored for

Fire Suppression

System Applications

and Fire Alarm Signaling





## ADDRESSABLE FIRE CONTROL PANELS - JFS-IP SERIES PRODUCT SUMMARY

The JFS-IP Series are extremely versatile analog/addressable fire alarm control platforms uniquely configured for suppression system releasing applications.

IP Series Panels are offered in 3 configurations as follows:

### JFS-IP60

Total system capacity of 60 addresses 5 Amp power supply with two Notification Appliance Circuits (NACs) rated at 3 Amps and two Input/Output (I/O) circuits, rated at 1 Amp each.

### JFS-IP127

Total system capacity of 127 addresses 5 Amp power supply with two Notification Appliance Circuits (NACs) rated at 3 Amps and two Input/Output (I/O) circuits, rated at 1 Amp each.

### JFS-IP4000

Total system capacity of 4064 addresses 10 Amp power supply with 6 Notification Appliance Circuits (NACs) rated at 3 Amps and four Input/Output (I/O) circuits, rated at 1 Amp each.

Any combination of smoke detectors, heat detectors or modules can be connected to the Signaling Line Circuit (SLC) loop. Additional system capacity can be achieved using multi-point SLC modules. The JFS-IP60 and 127 utilize a single SLC loop, while the JFS-IP4000 can have as many as 31 Analog/Addressable loop expansion modules. The SLC PAD loop protocol is a proven design for reliability and noise immunity.

The system does not require special cable or conductors for connection of the SLC as long as the cable is compliant with NFPA 70® (National Electrical Code®) and NFPA 72® (National Fire Alarm and Signaling Code®) or local codes. The system allows for Class A or Class B installations as well as “T-Taps”, with a maximum impedance of 50 ohms and distance of 10,000 Ft (3,048 M).



**The JFS-IP Series panels are listed for releasing fire suppression systems, as well as fire alarm and signaling.** The advanced software provides traditional capabilities for fire alarm, plus cross zones and counting zone style detection. In addition, the software includes adjustable timers for suppression and is capable of multiple release outputs across multiple hazards.



## SLC LOOP DEVICES AND SENSORS - SMALL FOOTPRINT...FAST RESULTS

**Devices interconnected to the SLC loop of JFS-IP Series fire alarm and releasing control panels** provide a real time status as to the conditions within the protected space. Addressable smoke detector sensitivity, heat detector temperature level and drift compensation are programmable. The panels also have a detector 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 can automatically adjust sensitivity based upon a programmable occupancy schedule. Addressable smoke detectors transmit a trouble condition when its chamber can no longer maintain programmed sensitivity.

SLC connected addressable devices include open area and duct smoke detectors, CO gas and heat detectors, single and dual input modules, combination two input and two relay output modules, zone modules (to connect conventional smoke detectors to the SLC loop using 1 address) addressable pull stations, notification appliance and releasing modules, relay and isolation modules. SLC device addresses are set using a seven position dip switch with an address ranging from 1-127.

PAD100-PD

Analog Photo Electric Smoke Detector is a smoke detector with a listed obscuration of 1.1 to 3.5% per foot.

PAD100-PHD

Combination Analog Photo Electric Smoke/Heat Detector, a smoke detector with a listed obscuration of 1.1 to 3.5% per foot and a fixed temperature 135°F heat detector.

PAD100-HD

Analog Fixed Temperature Heat Detector with alarm set-point range that is selectable from 135°F to 185°F.

PAD100-CD

Addressable CO gas detector.

PAD100-6B

6" (152 mm) round base that is mounted to an electrical box and wired for connection of one of the above sensors.

PAD100-4B

4" (102 mm) round base that may be mounted to an electrical box and wired for connection to the above sensors.

PAD100-IB

6" (152 mm) Isolator base that interrupts a short in a SLC and prevents the short from affecting protected devices on the loop.

PAD100-RB

6" (152 mm) Addressable Relay Base that contains one relay controlled by the SLC. Relay is rated at 2 amps at 30 VDC or 0.5A at 125VAC.

PAD100-SB

6" (152 mm) Addressable Sounder Base that contains an addressable sounder module that may be configured for local, group and all call.

PAD100-DUCTR

Addressable Duct Smoke Detector with Form C Relay.

PAD100-DUCT

Addressable Duct Smoke Detector.

PAD100-DD

Addressable photo electric smoke detector for use in DUCT/DUCTR enclosure.

## USER INTERFACE

The JFS-IP60 and 127 employ a 2" x 16" LCD display while the JFS-IP4000 has a 4" x 40" LCD display to provide system status.

The navigation keys are part of the onboard key pad and are used to manipulate menu options.

All JFS-IP series panels include the following LED's visible through the cabinet window:

- **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.

## P-LINK CIRCUIT - FASTER, STABLE & MORE FLEXIBLE WITH QUICKER INPUTS INTO THE PANELS

The **JFS-IP Series Control Panels** have a proprietary RS-485 communication protocol that interacts with field devices. The JFS-IP60 and 127 have a single P-Link circuit that can support up to 64 devices, while the JFS-IP4000 has 2 P-Link connections each capable of 64 devices for a total of 128 P-Link devices. The four wire P-Link power and communication bus includes communication and regulated 24 VDC power for field devices. Modules consist of annunciators, class A converters, Intelligent power supplies with 2 I/O's and 6 NACs, fiber interface modules, dual line telephone communicators, LED drivers, serial parallel gateway, relay modules and multi-connect modules to link up to 63 JFS-IP panels. P-Link connected devices bypass the SLC loop and provide quicker indication of an abnormal or alarm condition of field devices.



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 6 NACs. JFS-IP Series panels will support up to 31 power supplies and are capable of system wide strobe synchronization. In addition, the JFS-PS1000E has space for installation of up to six expansion cards mounted on stacker brackets allowing access to all SLC circuit connections.



## ETHERNET/I.P. CONNECTION

The JFS-IP Series control panels include an Ethernet connection which serves 2 functions:

1. **Programming port.**
2. **Connection to a building Wide Area Network (WAN) or Local Area Network (LAN).**

Once connected to the internet, the panel may be programmed to e-mail authorized users alarm, trouble, or supervisory conditions. Panel test, event history and detector status can also be emailed to appropriate personnel with prior authorization. E-mail queries may be sent to the panel requesting event history, detector status, configuration file or server status from a recognized E-mail account. Service reminders may be sent when inspections are due to avoid costly non-compliance fines from local fire authorities.

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

## IP CONNECTIVITY

With today's ever-expanding means of communication, it's important to be able to incorporate the same technology into your fire control system. This technology was taken into account when designing IP connectivity within these new panels.

By eliminating the cost of the phone lines, save big when using your building's existing network infrastructure. Additionally, the speed of IP communication allows for event information to be sent to the central station within seconds. Every JFS-IP-enabled fire alarm system has an on-board IP communicator that is listed to communicate with the SurGard III IP receiver.

## EMAIL & REMINDERS

JFS-IP-enabled fire alarm systems are email ready. History and Detector Status reports can be sent on demand as either a text or Excel® file for a professional appearance. The status events of the panel can be immediately emailed allowing users to be proactive in servicing customers.

Reports and the configuration file can be requested from the panel at any time by sending an email directly to the panel. Additionally, enhance your business by creating email reminders for your customers to schedule system tests or even to purchase new batteries.

## MULTI-CONNECT

The MC-1000 Multi-Connect Module allows up to 62 client fire panels to communicate with a remote/central station through a single control panel designated as the host. This can eliminate the need for multiple phone lines and monitoring accounts. Each MC-1000 module includes terminal connections for two client panels.



# ADDRESSABLE FIRE CONTROL PANELS - JFS-IP SERIES FEATURES

The JFS-IP Series panels are listed for releasing fire suppression systems. As many as 99 software zones are available and a 4,000 event non-volatile history buffer is provided in all of the panels.

## Dimensions

### JFS-IP60 and JFS-IP127

- Dimensions: 16"w (406mm) x 17"h (432mm) x 3-7/8"d (101mm)

### JFS-IP4000

- Dimensions: 18-15/16"w (481mm) x 27-5/16"h (693mm) x 4-7/16"d (114mm)

## AC Mains

### JFS-IP60 and JFS-IP127

- 3.0 Amps @ 120 VAC 50/60 HZ
- 2.0 Amps @ 240 VAC 50/60 HZ

### JFS-IP4000

- 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 and Lexan viewing window.

## Circuits

### COMMON FOR JFS-IP60, JFS-IP127 & JFS-IP4000

- Standby Current - 130 mA
- Alarm Current 200mA
- 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

## Power Supply

### JFS-IP60 and JFS-IP127

- 5 Amps power for NACs, I/O, and P-Link

### JFS-IP4000

- 10 Amps power for NACs, I/O, and P-Link

## Climatic Conditions

- 32°F to 120°F (0°C-49°C) with a maximum humidity of 93% non-condensing standards

## Standards

- 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



For more information please review the product specific an associated item data sheets at:  
[www.janusfiresystems.com](http://www.janusfiresystems.com)

ADDRESSABLE CONTROL PANEL • DS1317 JFS-IP60 • DS1318 JFS-IP127 • DS1319 JFS-IP4000