

Overview

The FireShield Plus fire alarm family consists of 3, 5 and 10 zone conventional fire alarm control panels, an integrated DACT/Dialer, serial annunciator modules, and serial remote relay modules. All of these components are microprocessor-controlled. The FireShield Plus family is ideal for both new and retrofit installations alike.

FireShield Plus incorporates features designed to simplify installation, operation and maintenance. These include front panel programming, one person walk testing, and selectable IDC and NAC types. In addition, when used with GE *CleanMe*®-compatible smoke detectors, FireShield Plus provides analog type features such as remote maintenance alert and automatic drift compensation that reduces false alarms and simplifies maintenance calls.

FSP502 and FSP1004 panels support Class A operation by combining pairs of on-board initiating circuits (IDCs) or notification circuits (NACs) to provide the necessary Class A circuits. For example, the FSP1004 comes factory set to support 10 Class B IDCs and four NACs. But it can be field-configured to provide five Class A IDCs, no Class B IDCs, and two Class A NACs – or any other combination of circuits that fall within the circuit-pairing parameters.

	FSP1004	FSP502	FSP302
Class B IDCs	Up to 10	Up to 5	3
Class A IDCs	Up to 5	Up to 2	Not supported
Class B NACs	Up to 4	Up to 2	2
Class A NACs	Up to 2	1	Not supported
NAC Power	3.5 amps*	3.5 amps	3.5 amps
Auxiliary power	0.5 amps	0.5 amps	0.5amps

Note: Class A operation will reduce the number of available Class B IDCs and/or NACs, depending on the panel configuration. See Specifications on page 5 for details.

*Expandable to 7.0 amps

Standard Features

- Available in 3, 5, and 10 IDC models
- IDC or NAC pairs convertible to single Class A circuits (10 and 5 IDC panels only)
- *CleanMe*® provides remote annunciation if a detector drifts out of UL/ULC limits reducing the chance of a false alarm
- Combination Waterflow and Supervisory IDCs reduces wire and zone counts
- NACs programmable by zone and individually selectable for Genesis, continuous, temporal outputs, or coded
- Front panel programmable simplifies installation and servicing
- Optional fully integrated DACT/Dialer for PC programming
- Genesis option allows precision synchronization and audible silence over two wires without additional modules
- On-board relays for Alarm, Supervisory and Trouble
- Optional serial bus relay modules are programmable for common or zone activation
- Optional serial bus remote annunciator family
- One person walk-test (audible or silent)
- Expandable power supply on 10 IDC panel reduces booster power costs
- Trim ring available for semi-flush mounting
- Supports 2M, "EC", 6200, 400, 500 and 700 series detectors

FireShield Plus

Conventional Fire Alarm Control Panels



Control Panel Specifications

Control Panels		FSP1004						FSP502			FSP302
Initiating Device Circuits – IDCs (Available combinations shown at right)	Class B	10	8	6	4	2	0	5	3	1	Three Class B IDCs
	Class A	0	1	2	3	4	5	0	1	2	
Notification Appliance Circuits – NACs (Available combinations shown at right)	Class B	4	2	2		0		2	0		Two Class B NACs
	Class A	0	1	1		2		0	1		
Power Supply		4.25 amps expandable to 7.5 amps						4.25 amps total			4.25 amps total
NAC Voltage Rating		24 V _{fwr}									
Maximum NAC current		2.0 amps each, 3.5 amps total 7.0 amps w/ optional transformer						2.0 amps each 3.5 amps total			2.0 amps each 3.5 amps total
AC Input	120 Vac 60 Hz...	2.2 amps w/ optional transformer						1.25 amps			1.2 amps
	230 Vac 50/60Hz...	1.1 amps w/ optional transformer						0.6 amps			0.6 amps
Base Panel Current Draw	Standby...	128 mA						104 mA			96 mA
	Alarm...	242 mA						224 mA			180 mA
Panel Battery Charge Capacity (sealed lead acid only)		Up to two 24 Ah batteries, 18 Ah in cabinet						Up to 24 Ah, 10 Ah max in cabinet *			
Auxiliary Current		0.5 amps max. May be programmed as resettable.									
Auxiliary Output		24 Vdc regulated									
IDC Alarm Current		3.0 mA (Consult detector compatibility list p/n 3100468 for maximum detectors per circuit)									
IDC Circuit		Maximum loop resistance: 13 Ohms; Maximum loop capacitance: 0.03 µF									
IDC Operating Voltage		16.9 to 29 Vdc									
UL Detector ID		100									
Alarm Contact (normally open Form C)		30 Vdc @ 1 A (resistive load)									
Trouble Contact (Form C)		30 Vdc @ 1 A (resistive load)									
Supervisory Contact (normally open Form C)		30 Vdc @ 1 A (resistive load)									
Operating Environment		Temperature: 32 - 120° F (0 - 49° C); Humidity: 5 - 93% RH, non-condensing									
Terminals (wire gauge)		18 - 12 AWG (0.75 mm ² - 2.5 mm ²)									
Asynchronous Serial Communications		Maximum resistance: 13 Ohms; Maximum capacitance: 0.03 µF									

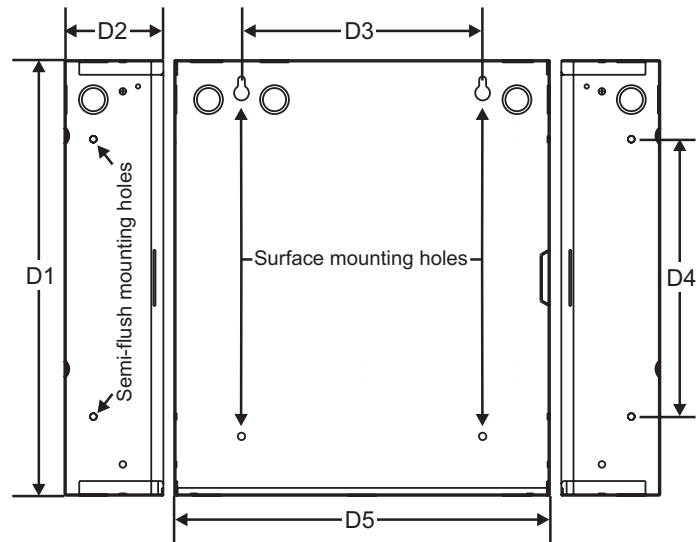
* If larger batteries are required, use an external battery cabinet.

DACT – F-DACT (mounts in panel)	
Receivers	Supports two receivers with two phone numbers each
Communications Protocol	Contact ID (SIA DC-05), 4/2 (SIA DC-02 P3)
Programming	Front panel controls or PC with appropriate software
Telephone line connection	Two RJ31X (plug-to-plug) cords supplied with DACT
Telephone lines	Two or one loop start lines on the public switched telephone network. Pulse or DTMF.
Telephone wall connector	RJ31X/CA31X equiv. or RJ38X/CA38X equiv.
Communications Compliance	Industry Canada CS-03; FCC/CFR 47 Parts 15 & 68; NFPA 72; UL 864; ULC S527
Operating Environment	Temperature: 32-120° F (0-49° C); Humidity: 93% RH, non-condensing
Current requirements	Standby: 65 mA; Alarm: 107 mA

Dimensions

Model	D1*	D2	D3	D4	D5*
Three- & five- zone	19.5 in (49.5 cm)	3.75 in (9.5 cm)	9.13 in (23.2 cm)	10.5 in (26.67 cm)	14.23 in (36.14 cm)
Ten-zone	30 in (76.2 cm)	3.75 in (9.5 cm)	7.75 in (19.7 cm)	21.27 in (54.0 cm)	16.25 in (41.27 cm)

*Add 1½ inches (3.81 cm) to D1 and D5 dimensions for trim kit.



Ordering Information

Part Number	Description	Ship Wt. lb. (kg.)
Control Panels		
FSP1004*	Conventional Fire Alarm Control Panel – 10 Class B IDCs and 4 Class B NACs (Pairs of IDCs and NACs convertible to single Class A circuits), 120 Vac	30.5 (13.8)
FSP1004-2	Conventional Fire Alarm Control Panel – 10 Class B IDCs and 4 Class B NACs (Pairs of IDCs and NACs convertible to single Class A circuits), 230 Vac. Grey cabinet.	30.5 (13.8)
FSP502*	Conventional Fire Alarm Control Panel – 5 Class B IDCs and 2 Class B NACs (Pairs of IDCs and NACs convertible to single Class A circuits), 120 Vac	18.5 (8.4)
FSP502-2	Conventional Fire Alarm Control Panel – 5 Class B IDCs and 2 Class B NACs (Pairs of IDCs and NACs convertible to single Class A circuits), 230 Vac. Grey cabinet.	18.5 (8.4)
FSP302*	Conventional Fire Alarm Control Panel – 3 Class B IDCs and 2 Class B NACs, 120 Vac	18.0 (8.2)
FSP302*-2	Conventional Fire Alarm Control Panel – 3 Class B IDCs and 2 Class B NACs, 230 Vac	18.0 (8.2)
F-TRIM35*	Semi-flush trim ring for FSP302 and FSP502	1.7 (0.8)
F-TRIM10*	Semi-flush trim ring for FSP1004	2.2 (1.0)
* Insert "G" for Gray cabinet or "R" for Red cabinet. Insert "F" for French language (grey cabinets, not available on 220v versions). Insert "GD" or "RD" for red and gray cabinets with dialer installed.		
Related Items		
F-XTR120	Expander Transformer, 120 Vac - For FSP1004* only	4.0 (1.8)
F-XTR230	Expander Transformer, 230 Vac - For FSP1004*-2 only	4.0 (1.8)
EOL3.6-1.1	Required UL listed End of Line Resistors – One 3.6K Ohm and one 1.1K Ohm. One required for each IDC configured as combination waterflow and supervisory.	0.1 (0.5)
EOL-P1	Required ULC listed End of Line Resistor Plate - includes one 1.1K, 3.6K and 4.7K Ohm resistor	1.0 (0.5)
Off Premises Communications		
F-DACT	Digital Communicator/Modem/LCD module (Mounts in control panel)	1.0 (0.5)
RPM	Reverse Polarity Module	3.0 (1.36)
CTM	City Tie Module (Requires 4" square or 2-gang North American electrical box)	1.0 (0.5)
Remote Annunciation		
FSRSI	Remote System Indicator – Includes LEDs for display of Power, Alarm, Supervisory, Trouble and Ground Fault, trouble sounder and silence/lamp test switch. Single gang trim plate included, multi-gang plates ordered separately. Mounts in a single or multi-gang North American electrical box.	0.3 (0.1)
FSRZI-A	Remote Zone Indicator – Includes red LEDs for five IDCs. Single gang trim plate included, multi-gang plates ordered separately. Mounts in single or multi-gang North American electrical box.	0.3 (0.1)
FSRZI-SA	Remote Zone Indicator – Includes LEDs for five IDCs. Single gang trim plate included, multi-gang plates ordered separately. Mounts in single or multi-gang North American electrical box. Jumper selected Alarm (red) or Supervisory (amber) indications.	0.3 (0.1)
FSAT1	Annunciator Trim Plate, 1 gang	0.1 (0.05)
FSAT2	Annunciator Trim Plate, 2 gang	0.1 (0.05)
FSAT3	Annunciator Trim Plate, 3 gang	0.1 (0.05)
FSAT4	Annunciator Trim Plate, 4 gang	0.1 (0.05)
FSRA10	Single Unit 10 zone remote annunciator for FSP1004 – Insert "F" after p/n for French language option	
FSRA10C	Single Unit 10 zone remote annunciator for FSP1004 (with common controls) – Insert "F" after p/n for French language option	
FSUIM	Common Function Graphic Driver/Interface - 9 relays and 5 switch inputs for common system indicators and controls	
Remote Relay Module		
FSRRM24	Remote Relay Module – Five Form C relays. Configurable for IDCs 1-5, or 6-10, or common system indications. Requires MFC-A or other listed fire alarm enclosure.	0.4 (0.2)
FSRRM-S11	11" Mounting track. Holds up to 4 FSRRM24s.	0.4 (0.2)
Accessories		
MFC-A	Multi-function Cabinet (fire alarm accessory enclosure)	7.0 (3.2)
Batteries		
12V4A	4.5 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	5 (2.27)
12V6A5	7.2 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	6 (2.72)
12V10A	11 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	10 (4.45)
12V17A	18 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	13 (5.90)
12V24A	26 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	20 (9.07)