

SHIELD[®]

FIRE ALARM CONTROL
PANELS



SHIELD OMEGA SR-P1OR (1 Loop) , SR-P2LR (2 Loops)

Analog Addressable Fire Control Panels (1 or 2 Loops)

Standard Features

- One full SLC circuit expandable to two
- 3 programmable relays
- 5.25A power supply
- Large graphic display
- Real time clock
- Compatible with graphics annunciator
- Powerful, network wide cause and effects (500 total). Fully user programmable by point or zone
- Can be networked with additional panel and / or SHIELD Omega panels
- Compatible with Omega R Annunciator
- Programmable through a PC connection to the panel
- Same look and feel as SHIELD Omega range
- Stores 1000 last events in history log
- Model ranges include with or without a Dual-Line internal DACT
- Compact, stylish enclosure
- Available in Red or Gray
- 2 Programmable NAC circuits with internal synchronization support

Product Overview

- SHIELD Omega is a versatile range of open protocol fire alarm control panels compatible with existing SHIELD Omega fire alarm panel technology.
- Available with one or two detection loops for a total of 250 primary points or 400 points using subpoints. SHIELD Omega uses leading edge micropro-

cessor based electronics to provide a flexible control system with high reliability and integrity.

- Suitable for all small to medium sized fire detection systems, SHIELD Omega control panels can be expanded and networked to become part of much larger systems if the need arises,



therefore providing a future proof solution for any installation.

- With its large graphical display and ergonomic button and indicator layout, the SHIELD Omega control panel is simple and straight forward to understand for installers, commissioning engineers and end users alike.

Added Features

SHIELD OMEGA with Internal Modem/DACT

- Dual line digital communicator & modem
- Central Station reporting; SIA and Contact ID
- On-board loop start terminal connections for both primary and secondary Telco lines

SHIELD OMEGA with Ether/DACT

- Dual line digital communicator and modem
- Central Station reporting; SIA and Contact ID
- Phone line jacks – RJ-11 (two)
- Modem speed: 33.6 Kbps for program downloading
- Virtual panel capability via Ethernet

SHIELD OMEGA with Network Interface Card

- Network uses standard Cat 5 cabling
- Up to 2,000 ft. between adjacent panels
- 115 Kbps constant network speed
- TCP and UDP communications through Omega-N
- Total network delay less than 3 sec. with 127 panels
- Network jacks – RJ-45 (Omega-N and Ethernet)
- Mapped Network; Display messages for Any or All nodes

SHIELD OMEGA with Media Gateway®

- All the features of the Ether/DACT and NIC plus:
- Enables network programming with direct TCP/IP access to each panel

Technical Specifications

Construction: 16AWG sheet steel
Dimensions: 14.5"W x 18.9"H x 4.25" D
Weight (without batteries): 20lb
Finish (lid & box): RAL3002 (Red) or BS 00 A 05 (Gray)
Finish (product labels): BS 00 A 05 (Gray)
Mains voltage supply: 230V AC 50 or 60 Hz.
Mains supply fuse: 1.6A 250V
Power supply DC rating: 24V 5.25 Amps
Aux 24V supply: Fused at 500 milliamps
Battery (24 hour standby): 9Ah 12V (2 per panel) (non-networked)

Fault contact rating: 30V DC 1 Amp
Alarm contact rating: 30V DC 1 Amp
NAC output rating: 3.1V across both channels, 2.3V across any one
Detection loop: 250 milliamp output
Serial expansion port: Serial RS485
PC port: Serial RS232
Network connection: Optional network Cards allow the use of SHIELD Omega-N interface SA-EI
NAC Synchronization: Internal Support
NAC Protocols: System Sensor, Wheelock, Gentex, Amseco

SHIELD OMEGA X SA-P20R (2 Loops), SA-P4LR (4 Loops)

Analog Addressable Fire Control Panels (2 or 4 Loops)

Standard Features

- UL 864 9th Edition listed
- Multi-Loop 2 Analog Addressable
- Loops Field upgradable to 4
- 126 primary points per loop
- Powerful, network wide cause and effects (500 total). Fully user programmable by point or zone
- 800 points per panel when using devices with sub-points
- Up to 10,000 ft. wiring length on SLC loop
- 64 Panels on a network
- Programmable through a PC connection to the panel, or through keypad
- Programmable relays – 5
- Supervised Powered Outputs – 3
- Programmable notification appliance circuits:4
- Power per NAC: 1.6 Amps Max
- Programmable outputs on SLC loop
- Programmable Function button on front display
- Fire Drill button on front display
- Day and night sensitivity settings (user programmable)
- Power Supply: 5.25 Amp, regulated & integrated
- LCD Display: 8x40
- Zonal Mode: Annunciation by zone w/o individual relationships
- Panel Ring Modes: Common, Zonal, and Stage 2
- NAC Outputs programmable as Continuous, March, Temporal
- Program cause and effects AND, OR, or any two (Cross Zone)
- Battery size: Up to 17 Ah in standard enclosure; up to 52 Ah with external cabinet
- Access levels: 3
- Access key switch: Yes
- Recognized for use in High Rise
- One-man walk test – Fire Test Mode
- Available in Red



Product Overview

- The SA-P20R and SA-P4LR analog addressable FACP supports 2 or 4 SLC loops for a total of 500 primary points or 800 points using subpoints. SLC loop communications uses standard twisted pair cabling, shielded cable is not necessary.
- The panel may be configured with various communication cards; Communications options support central station monitoring, Virtual Panel, and networking.
- The Panel can be configured as a stand alone panel with just a few devices for a small building, it can also operate as the building system and can be part of a network with a total of 64 nodes serving a multiple building campus or a very large facility.
- Auto Learn capability provides a convenient method to troubleshoot new installations before final programming is loaded.

Added Features

SHIELD Omega-X with eNET

- Network uses standard RS485 cabling
- Up to 2,000 ft. between adjacent panels
- 115 Kbps constant network speed
- Secure, fault tolerant communication
- Up to 64 nodes

SHIELD Omega-X with DACT

- Dual line digital communicator & modem
- Contact ID and SIA reporting
- UL 864 9th edition listed
- Zone or point reporting
- Backup and duplicate reporting

Technical Specifications

Primary AC: 230VAC @ 2 Amps 60hz

Output DC: 24VDC @ 4 Amps

Power Supply: 5.25 Amp regulated and integrated

Charger Current: 1.25 Amps max.

Dimensions: 14.5"W x 24"H x 5"D

Weight: 25 lbs. (without batteries)

Color: Red (optional gray)

Display: 8 line x 40 character LCD (320 characters total)

Zones: 500 Zones per network

SLC loops: 2 or 4 (class A or B)

Devices per loop: 126 sensors & modules (800 addresses + subaddresses max. per panel)

NAC Outputs: (4) 1.6 Amp @ 24VDC (class B)

Relay Outputs: (5) Form C1 Amp @ 30VDC

Voltage Outputs: (3) 500mA @ 24VDC, reverse polarity supervised

Aux. Power: 500mA @ 24VDC

Aux. Inputs: (3) digital pull downs

Current Consumption

SA-P20R 355 mA Standby
650 mA Alarm

SA-P4LR 455 mA Standby
765 mA Alarm

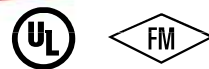
SHIELD OMEGA-R SA-EVR

Addressable Repeater Panel

Standard Features

- Available in Red
- Up to 15 annunciators can be connected to each SHIELD Omega fire control panel
- Large liquid crystal display (240x64 pixels)
- High brightness LED indications
- Internal sounder
- Replicates all panel controls

- Simple, two-wire serial connection
- Small, style enclosure
- Removable electronics for easy installation
- 24V DC powered
- Low power consumption
- Multi language options
- Connection supervised by SHIELD Omega fire control panel



Product Overview

- Designed and manufactured to the highest standards in a quality controlled environment the SHIELD Omega-R fire alarm reporter provides a simple and convenient method of extending the controls and indications of the SHIELD Omega fire alarm control panel to other locations.
- The large, graphic liquid crystal display and high brightness LED indicators

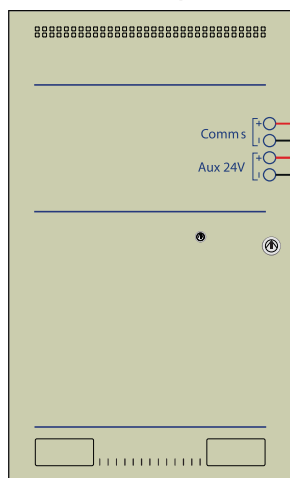
duplicate the indications on the SHIELD Omega fire alarm control panel at up to 15 additional locations via a simple, two-wire serial data connection.

- The SHIELD Omega-R is powered by 24V DC (which can be via an additional 2 conductors from the control panel or local 24V DC listed supply).
- SHIELD Omega-R is housed in a small enclosure which is styled similarly to

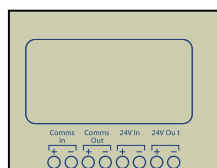
the SHIELD Omega control panel and is ideal for installations where a large control panel would be detrimental to décor such as entrance halls.

- Up to 15 SHIELD Omega-R annunciators can be connected to each control panel on the Omega network making Omega-R ideal where multiple points of indication and/or control are required such as nurses stations or shop units.

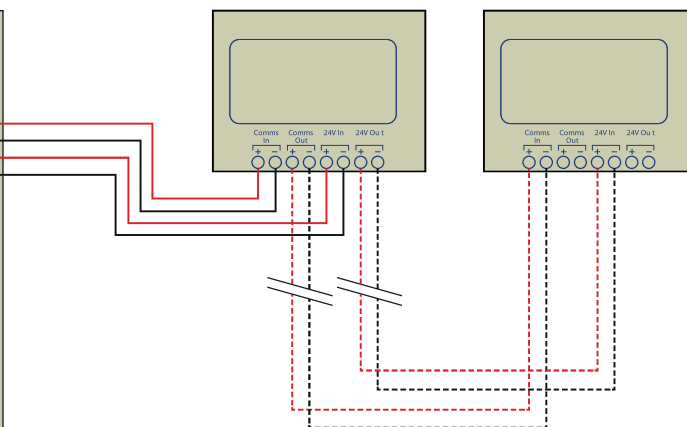
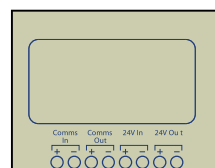
SHIELD Omega series control panel



SHIELD Omega-R #1



SHIELD Omega-R #2



Technical

- | | |
|--|--|
| Construction | - 1.2mm mild sheet steel |
| Cable entry | - 4 knockouts in back of box and 1 in left and right sides |
| Weight | - 1.6kg |
| Finish | - RAL3002 (Red) or BS 00 A 05 (Grey) |
| 24V supply | - 21 to 30V DC |
| Maximum ripple current | - 200 millivolts |
| Quiescent current of panel in mains fail | - 0.03 Amps |
| Serial data connection | - 2 core RS485 (Up to 1200 metres total cable length) |
| Maximum terminal capacity | - 12AWG |

Panels

Product Code	Description	Size (mm)
SA-EVR	Omega-R Repeater Panel - Red	263 x 191 x 42