SHIELD
TRUSTED WORLDWIDE

ADDRESSABLE MODULES

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MINI MONITOR MODULE - S-A4041

The Mini Monitor Module is an interface within an entirely new housing. This allows the unit to be fitted onto a standard 35mm DIN-Rail (using a twistclick motion) or mounted within an enclosure, such as a Pull Station. It is designed to monitor the state of one or more single pole, voltage free contacts connected on a single pair of cables and to report the status to compatible analog control equipment.

- DIN-Rail mountable
- Designed for use where space is limited
- Interrupt/non-interrupt in one unit
- 'Pre-alarm' status available
- Three, colored LEDs, giving clearer status indication

Technical Data

Operating voltage	17-28 V DC
Modulation Voltage	5-9 V (peak to peak)
Designed to	24 V DC nominal

Current Consumption at 24V

Quiescent current	200 µA
LED Operated Alarm	3.4 mA + Quiescent
Remote and LED alarm	6.2 mA + Quiescent
Switch fault LED	+2.8 mA (pulsing 0.5s ON, 0.5s OFF)

DUAL PRIORITY SWITCH MONITOR MODULE S-A4042

SHIELD Dual Priority Switch Monitor Module contains two Priority Switch Monitor Modules on a single plate.

- Loop-powered
- Fast response time
- nterrupt facility

Technical Data

Style	Fascia Plate With Wiring Terminals
Temperature range	32°F to 120°F
Wiring size	24 AWG - 14 AWG
Signal Line Circuit (SLC)	Supervised power limited
Working Voltage	17 - 28 V DC
Modulation Voltage	5 - 9 V DC (peak to peak)
Operating Current	Supervisory Current : 1.5 mA
	Surge Current : 2.5 mA
	Maximum Alarm Current : 5 mA
Functional States	Analog Level (normal) : 16 Analog Level (alarm) : 64 Analog Level (trouble) : 4
Dimensions (L x W x D)	114 mm x 114 mm x 25 mm

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SWITCH MONITOR MODULE - S-A4043

SHIELD Switch Monitor Module is designed to monitor the state of one or more single pole, voltage free contacts connected and to report the status to SHIELD compatible analog control equipment.

- Three input states - 'normal', 'trouble', and 'alarm'
- Visible LED
- Loop-powered

Technical Data

Style	Fascia plate with wiring terminals
Temperature range	32°F to 120°F
Wiring size	24 AWG - 14 AWG
Signal line circuit (SLC)	Supervised power limited
Working Voltage	17 - 28 V DC
Modulation Voltage	5 - 9 V DC (peak to peak)
Operating Current	Supervisory Current: 1.1 mA Surge Current: 2.5 mA Maximum Alarm Current: 5 mA (LED on)
Functional States	Analog Level (normal): 16 Analog Level (alarm): 64 Analog Level (trouble): 4
Dimensions (L x W x D)	114 mm x 114 mm x 25 mm

SWITCH MONITOR INPUT/OUTPUT MODULE S-A4045

SHIELD Switch Monitor Input/Output Module provides a voltage free, single pole, change-over relay output, a single monitored switch input and unmonitored, non-polarized opto-coupled input.

- Reports 'trouble', 'switch open' and 'switch closed' levels
- Visible LED
- Loop-powered

Technical Data

Style	Fascia plate with wiring terminals
Temperature range	32°F to 120°F
Wiring size	24 AWG - 14 AWG
Signal line circuit (SLC)	Supervised power limited
Working Voltage	17 - 28 V DtC
Modulation Voltage	5 - 9 V DC (peak to peak)
Operating Current	Supervisory Current : 8000 µA Surge Current : 7.5 mA Maximum Alarm Current: 6.0 mA (LED on)
Functional States	Analog Level (normal) : 16 Analog Level (alarm) : 64 Analog Level (trouble) : 4
Dimensions (L x W x D)	114 mm x 114 mm x 25 mm

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SOUNDER CONTROL MODULE - S-A4046

SHIELD Sounder Control Module monitors and controls the operation of a zone of conventional sounders and reports their status to the control panel.

- Allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off
- May be synchronized when in pulsed operation
- Can also be used for public address speakers

Technical Data

Style	Fascia plate with wiring terminals
Temperature range	32°F to 120°F
Wiring size	24 AWG - 14 AWG
Signal line circuit (SLC)	Supervised power limited
Working Voltage	17 - 28 V DC
Modulation Voltage	5 - 9 V DC (peak to peak)
Operating Current	Supervisory Current : 1 mA Surge Current : 2.5 mA Maximum Alarm Current : 4 mA (LED on)
Functional States	Analog Level (normal) : 16 Analog Level (trouble) : 4
Dimensions (L x W x D)	114 mm x 114 mm x 25 mm

ISOLATOR MODULE - S-A4051

The Isolator is placed at intervals on the loop and ensures that, in the case of a short circuit, only the section between the isolators will be affected. When the short circuit is removed, the isolators automatically restore power and data to the isolated section.

- Detects wiring short-circuits using patented technology
- Minimizes disruption from short-circuits
- Automatic de-isolation on short-circuit removal
- Up to 20 devices may be installed between isolators

Technical Data

Device Type	Isolator
Style	Mounting Base and twist-in isolator module
Working Voltage	17 - 28 V DC
Operating Current	Modulation Voltage : 5 - 9 V (peak to peak) Supervisory Current : 2.5 m A Surge Current : 0 m A Maximum Current drawn : 8.5 mA Maximum Line Impedance: 50 Ω
Temperature Range	32°F to 100°F
Dimensions (diameter x height)	100 mm x 31.25 mm
Weight	82 g

Ordering Information

S-A4051	Isolator module
S-A4002	Isolator base

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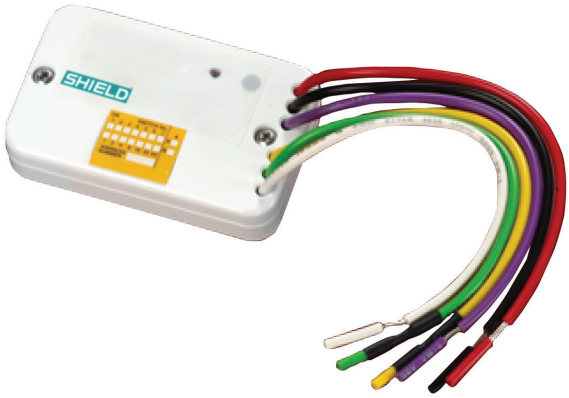
MINI PRIORITY SWITCH MONITOR MODULE S-A4047

SHIELD Mini Priority Switch Monitor Module is designed to monitor the state of one or more single pole, voltage free contacts and to report the status to SHIELD compatible analog control equipment. It can also place a signal on the loop to provide early warning if a device such as a pull station is operated.



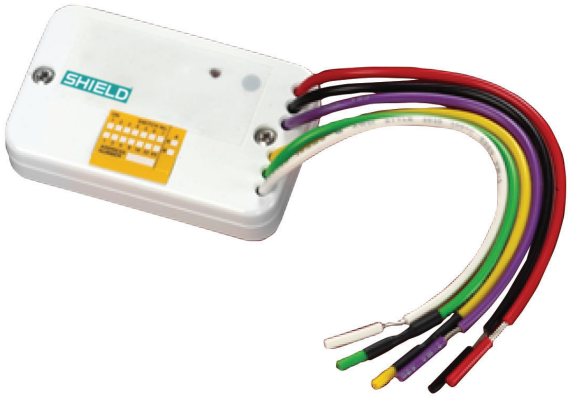
- Loop-powered and three input states - 'normal', 'trouble' & 'alarm'
- Visible LED with remote LED connection option
- Designed to fit into equipment with limited space

Technical Data

Style	Fascia plate with wiring terminals
Temperature range	32°F to 120°F
Signal line circuit (SLC)	Supervised power limited
Working Voltage	17 - 28 V DC
Modulation Voltage	5 - 9 V DC (peak to peak)
Operating Current	Supervisory Current : 1 mA Surge Current : 2.5 mA Maximum Alarm Current : 5 mA
Functional States	Analog Level (normal) : 16 Analog Level (alarm) : 64 Analog Level (trouble) : 4
Dimensions (L x W x D)	76 mm x 50 mm x 12.5 mm

MINI SWITCH MONITOR MODULE - S-A4048

SHIELD Mini Switch Monitor Module is designed to monitor the state of one or more single pole, voltage free contacts and to report the status to compatible analog control equipment.



- Loop-powered and three input states - 'normal', 'trouble', and 'alarm'
- Visible LED with remote LED connection option
- Designed to fit into equipment with limited space

Technical Data

Style	Fascia plate with wiring terminals
Temperature range	32°F to 120°F
Signal line circuit (SLC)	Supervised power limited
Working Voltage	17 - 28 V DC
Modulation Voltage	5 - 9 V DC (peak to peak)
Operating Current	Supervisory Current : 1.1 mA Surge Current : 2.5 mA Maximum Alarm Current : 5 mA
Functional States	Analog Level (normal) : 16 Analog Level (alarm) : 64 Analog Level (trouble) : 4
Dimensions (L x W x D)	76 mm x 50 mm x 12.5 mm

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120V AC INPUT/OUTPUT MODULE - S-A4049

SHIELD 120V AC Input/Output Module is a loop powered device which incorporates a monitored input circuit for connection to dry contacts, as well as a 4A rated dry contact relay output. It is mounted on a plastic fascia plate for use with a 4" square or 2 gang electrical back box.

- Loop-powered
- Visible LEDs
- 4A rated dry contact

Technical Data

Style	Fascia plate with wiring terminals
Temperature range	32°F to 120°F
Wiring size	24 AWG - 14 AWG
Signal line circuit (SLC)	Supervised power limited
Operating Voltage	17 - 28 V DC, 20-28 V DC (UL listed)
Modulation Voltage	5 - 9 V DC (peak to peak)
Operating Current	Supervisory Current at 17 V < 0.95 mA Alarm Current at 17 V < 2.80 mA Supervisory Current at 28 V < 0.95 mA Alarm Current at 28 V < 3 mA (LED on) Maximum Alarm Current < 5 mA
Functional States	Analog Level (normal) 16 Analog Level (alarm) 64 Analog Level (trouble) 4
Dimensions (L x W x D)	114 mm x 114 mm x 25 mm

RELAY OUTPUT MODULE - S-A4050

SHIELD Relay Output Module provides a single 2-pole change over relay.

- Loop-powered
- Can be placed anywhere on loop

Technical Data

Style	Fascia plate with wiring terminals
Temperature range	32°F to 120°F
Wiring size	24 AWG - 14 AWG
Signal line circuit (SLC)	Supervised power limited
Working Voltage	17 - 28 V DC
Modulation Voltage	5 - 9 V DC (peak to peak)
Operating Current	Supervisory Current : 0.85 mA Surge Current : 2.50 mA Maximum Alarm Current : 3.50 mA (LED on)
Functional States	Analog Level (normal) : 16
Relay Output	Non Supervised, Dry Contact 24 V DC, 2 A; 30 V DC, 0.5 A
Dimensions (L x W x D)	114 mm x 114 mm x 25 mm

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