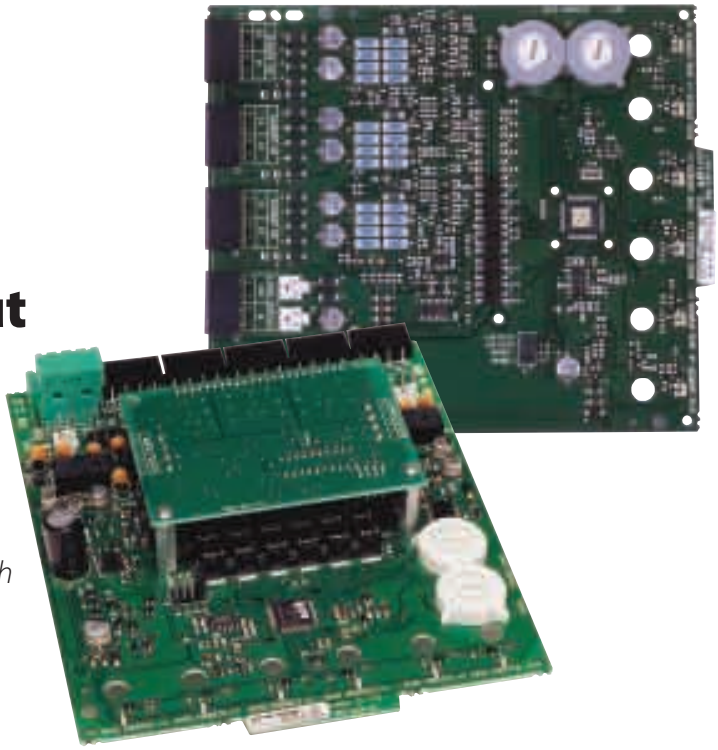
500 Series Multiple Input and Output Modules



System Sensor multiple input and output modules are designed to meet a range of applications in which numerous single modules are used.

Features

- Removable 12 to 18 AWG plug-in terminal blocks
- Individual LED indicators
- Unused addresses may be disabled
- Rotary address switches
- Class A or B operation
- Mount up to two modules in BB-2 enclosure (optional)
- Mount up to six modules in BB-6 enclosure with CH-6 chassis (optional)
- Mounting hardware included

The design of the System Sensor 500 Series multiple input and output modules allows for installation ease and time savings The monitor and control modules can be used to supervise and activate sounders, strobes, door closers, pull stations, waterflow switches, conventional smoke detectors and more. The conventional zone interface module is ideal for retrofit applications to monitor zones of conventional two-wire detectors. Each module has its own address. Modules are addressed with easy-to-use rotary code switches. Provisions are included for disabling unused addresses. Up to two modules mount in a BB-2 enclosure with built-in chassis and up to six modules mount in a BB-6 enclosure with the CH-6 chassis. Wiring terminals are easily accessible for trouble-shooting purposes.

CR-6 SIX RELAY CONTROL MODULE

The CR-6 Six Relay Control module consists of six Form-C relays. The first address is set from 01 to 94, while the remaining modules are automatically assigned to the next five higher addresses. Provisions are included for disabling a maximum of three unused addresses. A single isolated set of dry relay contacts is provided for each module address which is capable of being wired for either a normally open or normally closed operation. The module allows the control panel to switch these contacts on command. No supervision is provided for the controlled circuit.

SC-6 SIX SUPERVISED CONTROL MODULE

The SC-6 Six Supervised Control module provides supervised monitoring of wiring to load devices that require an external power supply or amplifier to operate, such as horns, strobes, speakers or bells. Upon command from the control panel, the SC-6 will disconnect the supervision and connect the external power supply across the load device. The first module is addressed from 01 to 94, while the remaining modules are assigned to the next five higher addresses. Provisions are included for disabling a maximum of three unused modules. Each module has terminals for connection to an external supply circuit for powering devices on its notification appliance circuit. One or multiple power supplies or amplifiers may be used.

There is a short circuit protection monitor for each module. This is provided to protect the external power supply against short circuit conditions on the NAC. When an alarm condition occurs, the relay which connects the external

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supply to the NAC will not be allowed to close if a short circuit condition currently exists on the NAC. In addition, an algorithm is incorporated to find a short when the module is active. The module will close all circuits that are not shorted to find the NAC with the problem.

SYNC-1 ACCESSORY CARD

The SYNC-1 is an optional accessory to the SC-6 and is designed to provide a means of synchronizing a series of horns, strobes, and horn/strobes. The SYNC-1 is able to synchronize the temporal-coded horns, the one second flash timing of the strobe, and silencing the horns of the horn/strobe combination over a two-wire circuit while leaving the strobes active. Each SYNC-1 accessory card has the capability of synchronizing six Class B circuits or three Class A circuits.

CZ-6 SIX ZONE INTERFACE MODULE

The CZ-6 Six Zone Interface module provides an interface between the intelligent alarm system and a two-wire conventional detection zone. A common SLC input is used for all modules, and the initiating device circuits share a common external supply. Otherwise, each module operates independently from the others. The first module is addressed from 01 to 94 while the remaining modules are assigned to the next five higher addresses. Provisions are included for disabling a maximum of two unused modules. All two-wire detectors being monitored must be two-wire compatibility listed with the modules. The CZ-6 transmits the status of a zone of two-wire detectors to the fire alarm control panel. Status conditions are reported as normal, open or alarm. The interface module supervises the zone of detectors and the connection of the external power supply.

IM-10 TEN INPUT MONITOR MODULE

The IM-10 Ten Input Monitor module provides an interface between a control panel and normally open contact devices such as pull stations, security contacts, or flow switches. The first address is set from 01 to 90 and the remaining modules are automatically assigned to the next nine higher addresses. Provisions are included for disabling a maximum of two unused addresses. The supervised state (normal, open or short) of the monitored device is sent back to the panel.

500 Series Module Specifications

General Specifications	
Operating Voltage	15 to 32 VDC
Maximum SLC Wiring Resistance	40 Ohms
Temperature Range	32°F to 120°F (0° to 49°C)
Relative Humidity	10% to 85% noncondensing
Wire Gauge	12 to 18 AWG
Dimensions	6.8″H × 5.8″W × 1.25″D
Specifications: CR-6	
Standby Current	1.45 mA maximum
Alarm Current	32 mA maximum (assumes all six relays have been switched once and all six LEDs solid on)
Maximum IDC Wiring Resistance	40 Ohms
Relay Current	30 mA/Relay Pulse (15.6 mS pulse duration) pulse under panel control
Relay Contact Ratings	30 VDC; 70.7 VAC
Specifications: CZ-6	
Standby Current	2 mA maximum
Alarm Current	40 mA maximum (assumes all six LEDs solid on)
Maximum IDC Wiring Resistance	25 Ohms
External Supply Voltage	DC Voltage: 18 to 28 volts power limited Ripple Voltage: 0.1 volts RMS maximum Current: 90 mA per circuit
Compatible Detectors	Contact System Sensor for a current list
Specifications: SC-6	
Standby Current	2.25 mA maximum
Alarm Current	35 mA maximum (assumes all six relays have been switched once and all six LEDs solid on)
Maximum NAC Circuit Wiring Resistance	40 Ohms
Power Rating Per Circuit	63 W @ 70.7 VAC
Relay Contact Ratings	30 VDC; 110 VAC

Specifications: IM-10	
Standby Current	3.5 mA maximum
Alarm Current	60 mA maximum (assumes all ten LEDs solid on)
Maximum IDC Wiring Resistance	40 Ohms
Maximum IDC Voltage	12 VDC
Maximum IDC Current	1 mA

Accessories



SYNC-1 Accessory Card



BB-6 Enclosure with CH-6 Chassis

Specifications: SYNC-1	
Operating Voltage	11 to 30 VDC
Maximum Load on a Loop	Class A/Style Z: 3A Class A/Style Y: 3A per pair
Standby Current	+0 Position: 15 mA +2 or +4 Position if connected to supply: 2.5 mA
Specifications: BB-2 Enclosure	
Dimensions	12″H × 9″W × 3.67″D
Specifications: BB-6 Enclosure	
Dimensions	24″H × 12.55″W × 6.47″D

SYSTEM SENSOR®

3825 Ohio Avenue • St. Charles, IL 60174
Phone: 800-SENSOR2 • Fax: 630-377-6495

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