

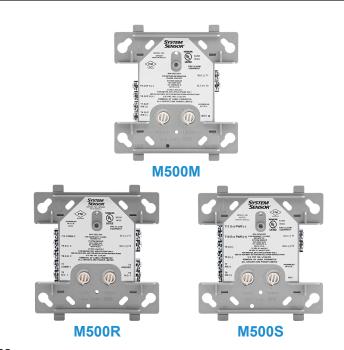
# **500 Series AA Modules**

#### **Overview**

System Sensor's analogue addressable module products are designed to meet a wide range of applications. Monitor and control modules can be used to supervise and activate sounders, strobes, door closers, manual call points, water-flow switches, and more. Each module is rigorously designed and tested for electromagnetic compatibility and environmental reliability, in many cases exceeding industry standards. Modules are addressed with easy-to-use rotary code switches. Full size modules mount in the universal mounting box PMB125. Wiring terminals are easily accessible for troubleshooting.

#### **M500M Monitor Module**

The M500M module interfaces with contact devices such as water-flow switches, providing full supervision of monitored circuit wiring. Conventional 4-wire smoke detectors can be monitored through the alarm and fault contacts, wired as an initiating circuit to the module. In addition to transmitting the



supervised state of the monitored circuit (Normal, Open or Short/Alarm), the full analogue supervision measurement is sent to the panel, allowing detection of impedance changes in the supervised circuit. Independently tested and SAI Global StandardsMark certified to AS ISO 7240.18:2015.

#### **M500R Clean-Contact Control Module**

The M500R Control Module can be used to provide a voltage-free, unsupervised change-over contact where electrical isolation is required between the loop and the load devices being controlled. Independently tested and SAI Global StandardsMark certified to AS ISO 7240.18:2015.

#### **M500S Supervised Control Module**

The M500S Control Module provides supervised monitoring of wiring to load devices that require external power to operate, such as horns, strobes, bells, etc. Upon command from the panel, the M500S disconnects the supervision and connects the external supply across the load device, thereby isolating the external supply from the system. Analogue measurement of the supervised wiring is transmitted to the panel, allowing detection of impedance changes.

#### **Features**

- » Analogue supervision (M500M and M500S)
- » Latching output drive circuit controlled by panel command (M500S and M500R)
- » Visible LED controlled by panel
- » Low standby current
- » Stable communications technique with noise immunity
- » Direct dial decade address entry
- » Rugged industrial construction
- » SEMS screws for easy wiring
- » Mount in PMB125 (universal mounting box)

### **Specification**

General				
Operating Voltage	15 Vdc to 32 Vdc			
Operating Temperature Range	0 °C to 49 °C			
Humidity	0 to 93 %, RH, non-condensing			
PMB125 Mounting Box Specifications	125 x 125 x 51.5 mm (W x H x D)			
M500M Specification				
Average Operating Current	350 $\mu$ A (one communication every 5 seconds, with 47 k $\Omega$ EOL)			
Maximum Current Draw	5.0 mA (with LED latched on)			
Maximum IDC Current	400 µA			
EOL Resistance	47 kΩ (included)			
M500S Specification				
Operating Current	350 $\mu$ A max. (one communication every 5 seconds, with 47 k $\Omega$ EOL) 485 $\mu$ A max. (communicating, NAC shorted)			
Maximum Current Draw	6.5 mA (with LED latched on)			
EOL Resistance	47 kΩ (included for supervised circuit)			
	Current Rating	Max. Voltage	Load Description	
Relay Contact Ratings	2 A	30 Vdc	Resistive	
	0.46 A	30 Vdc	Inductive (L/R = 20 ms)	
M500R Specification				
Average Operating Current	300 μA (one communication every 5 sec.)			
Maximum Current Draw	6.5 mA (with LED latched on)			
EOL Resistance	Unused			
	Current Rating	Max. Voltage	Load Description	
Relay Contact Ratings	2 A	30 Vdc	Resistive	
	0.46 A	30 Vdc	Inductive (L/R = 20 ms)	

## **Ordering Information**

Product Code	Description	
M500M	AA Single Input Module (Uses PMB125 Mounting Box)	
M500R	AA Single Relay Output Module (Uses PMB125 Mounting Box)	
M500S	AA Single Supervised Relay Output Module (Uses PMB125 Mounting Box)	
PMB125	Universal AA Mounting Box, 125 x 125 x 51.5 mm	

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