



## M500M-4-20 Analog Input Module

*The System Sensor M500M-4-20 analog input module demonstrates our commitment to offer solutions for all applications.*

### Features

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- SEMS screws for easing wiring
- Panel controlled status LED
- Analog communications
- Rotary address switches
- Low standby current
- Mounts in standard 4 inch junction box



The **M500M-4-20 Analog Input Module** allows the connection of 4-20 mA output sensors to a fire alarm control panel (FACP). The module converts the sensor output to a common communication protocol that can be interpreted by the FACP for monitoring and display. There are numerous sensors available in the marketplace that communicate using a 4-20 mA output, including gas sensors, temperature sensors, air speed sensors, and more.

The **M500M-4-20 Module** includes numerous safeguards and protective features to ensure trouble-free operation. The module accepts both 3-wire (device sink) and 2-wire configurations. The external power supply is isolated from the communication line. In addition, a 500 mA current limiter and a cutoff circuit protect the module's electrical supply from short circuits. In the event of a short, the output voltage will cycle within safe limits until the short is removed. The output signal is sampled and filtered for transients and noise prior to passing the signal on to the FACP. If the current running through the sensing circuitry exceeds 25 mA, the output voltage will shut down and the short protection process will begin.

As with all of the System Sensor intelligent modules, the **M500M-4-20 Analog Input Module** is rigorously designed and tested for electromagnetic compatibility and environmental reliability, in most cases exceeding industry standards. The device is equipped with a panel-controlled red LED for local status indication. The standard SEMS terminals will accept wiring from 18ga to 12ga (AWG).

### Agency Listings

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## M500M-4-20 Module Specifications

General Specifications	
Operating Voltage	15 to 32 VDC
Communication Line Loop Impedance	40 $\Omega$ max.
Temperature Range	14°F to 140°F (-10° to 60°C)
Relative Humidity	10% to 93% noncondensing
Shipping Weight	5.5 oz (156 g)
Dimensions	4.275 in W x 4.675 in H x 1.400 in D
Specifications, M502M	
Standby Current	700 $\mu$ A max @ 24 VDC (one communication every 5 sec. with LED enabled)
External Power Supply	12 to 28 VDC
External Supply Standby Current	10 mA @ 24 VDC (nominal - module only, does not include sensor current)
External Supply Sensor Current	500 mA (maximum)
LED Current	6mA (with LED latched on)



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

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A05-0438-000 • 4/08 • #1887