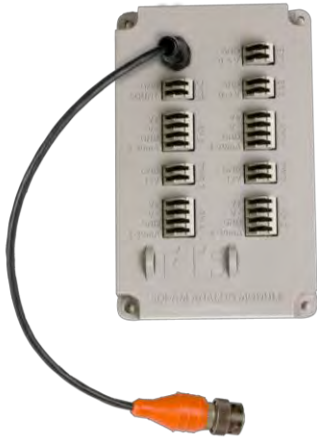


FTS AXIOM™ SDI-AM Analog module

PRODUCT SPECIFICATIONS



The FTS SDI-AM Analog Module is a flexible expansion interface that is compatible with a wide variety of analog sensors and any SDI-12 compliant datalogger/DCP such as the Axiom. It allows the Axiom to connect to virtually any analog sensor, and control power to a wide range of devices (ex. pumps, cameras, actuators, etc.).

The SDI-AM includes four individually configurable analog input channels; two switched 12V power supply outputs, two individually configurable, stable, excitation voltage outputs and a general purpose counter input. The electronics are enclosed in a rugged case to provide a compact and waterproof enclosure that includes standard FTS shoulder bolts for quick installation on our unique keyway plates. Electrical connections are made by easy to use spring clip terminal strip connectors.

As an SDI device, it has a configurable SDI address and is powered by +12VDC from a datalogger's SDI-12 bus. Normally the module is connected to an SDI port of a data logger; however, the sensor may also be connected to any SDI-12 compliant controller.

SDI modules can be used in multiples to provide a maximum of interface flexibility with a large number of analog sensors.

The SDI-AM is fully configurable through the Axiom datalogger's touchscreen display.



- Power supply voltage range:** -9.6 VDC to 18 VDC (12 VDC nominal)
- Standby power consumption:** < 1mA
- Power output:**
 - 2 switched power 12VDC outputs @ 520 mA maximum current, short circuit protected
 - 2 programmable excitation outputs 0-5V @ 20mA switchable
- Terminal strip mechanism:** Spring clip
- Physical:** 6.69" x 3.93" x 1.97" (17cm x 10cm x 5cm); Weight 0.88lbs (0.4kg)
- Operating temperature:** -40°C to +60°C
- Excitation outputs:**
 - 2 individually programmable outputs, 0-5 VDC @ up to 20mA maximum; accuracy: ±5 mV (0.1% of full scale), resolution: 0.35 mV
 - Programmable to 1 mV
- Analog inputs:**
 - single-ended or 4 differential inputs
 - Configurable for 4-20 mA sensor inputs
 - 24-bit converter resolution
 - Current sense: 100 ohms to ground, 0.1% accuracy

Input ranges	SDI resolution	Accuracy
5 V	1 µV	±1.5 mV
2.5 V	1 µV	±0.75 mV
1 V	1 µV	±0.3 mV
100 mV	100 nV	±0.1 mV
55m V	10 nV	±0.055 mV
25m V	10 nV	±0.0375 mV

- Single ended:** 0V to full scale value of range
- Differential mode:** Differential voltage: ± full scale value of range
- 25 mV, 55 mV, 100mV ranges:** -0.15 V to +0.95 V
- 1 V, 2.5 V, 5V ranges:** -1.5 V to +5 V
- Current sense:** 100 ohms to ground, 0.1% accuracy

- Counter input:** Contact closure switch
- Maximum frequency at 50% duty cycle:** 1 kHz
- Minimum closure time:** 700 microseconds, internally debounced
- Counter range:** 0 to 9,999,999 with auto rollover

SDI compliance: v.1.3