

SDI-12 ANALOG PLUS MODULE

6661-1248-1



**5 PORTS TO ACCOMMODATE A VAST ARRAY OF SENSORS:
HIGHLY ACCURATE & STABLE
PROGRAMMABLE INPUT RANGE
SUPPORTS LOW LEVEL 10 MV &
HIGH LEVEL 0-5V SENSORS**



FEATURES

Four analog inputs with...

- Configurable - single-ended or differential voltage
- 5 PORTS to accommodate a vast array of sensors: 3 ports (AN1, AN2, AN3) exclusively for analog, 1 (DIN) exclusively for digital, 1 (AN4) for analog as well as logic level driven digital
- Reference voltage output for ratiometric sensors (bridges, potentiometers)
- 24-bit A/D converter
- 0-5V input range
- Programmable gain (1 to 128) user specified or automatic
- Simultaneous 50Hz and 60Hz noise rejection
- One digital input with selectable pull-up (or pull-down) to support switch-closure inputs
- Additional digital input for 0-5 V signals (shared with analog channel 4)
- Frequency measurement : 1 Hz to 8 kHz
- Counts measurement
- Programmable switch de-bounce times to prevent multiple counts on a single event
- Programmable switched 5 volts and 12 volts output
- Low power consumption : < 0.5 mA in standby mode
- Programmable coefficients for conversion to engineering units such as degrees C.
- Supports SDI-12 version 1.3
- Configurable measurement commands
- Non-volatile setup
- DIN rail mountable with a real spring on the metal clip
- Pluggable terminal blocks

SPECIFICATIONS

Input Voltage	8 – 16 VDC
Power Consumption	< 0.5mA quiescent, 6 mA typ. measuring (exclusive of current required by sensors)
Temperature Range	-40°C to +65°
Communication Interfaces	SDI-12
SDI-12 Support	V1.3 - will work with V1.0, V1.1, V1.2, and V1.3 data loggers
Analog inputs	3 dedicated, 1 programmable
	0 – 5V input range.
	Programmable Gain up to 128.
	Any 2 analog inputs can be measured as a true differential pair, not just the difference of two single ended readings.
	24 bit A/D converter
	Programmable high impedance input buffer (0.05 V to 3.5V)
Analog Accuracy	+ 0.02% FS @ 25°C
Temperature Coefficient	+ 5 ppm/°C typ., + 10 ppm/°C max.
Shared input	One analog input can be configured to measure digital inputs up to 8 kHz.
Dedicated Digital input (1)	Up to 8 kHz. Programmable 20 k Ohm pull-up for switch closure inputs.
Input Filtering	Digital inputs support programmable de-bounce filtering
Reference output	2.5V reference – 10 mA max
Switched Supply Output	Programmable 5V or switched supply voltage – 100 mA max
	5V output + 5%
	Switched supply drop, 0.5V at 10 mA, 1.7 V at 100 mA
Mounting	DIN rail w/spring-loaded metal clip
Wiring Connections	Four pluggable terminal blocks