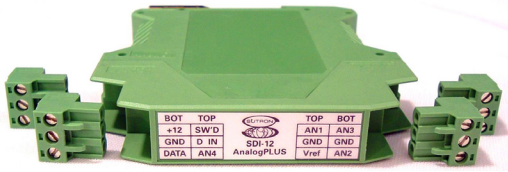


# SDI-12 Analog Plus Module



## Dimensions

Height 4.5 in. (11.5 cm)  
 Length 4 in. (10.2 cm)  
 Width .7 in (1.8 cm)  
 Weight 2 lbs. (0.9 kg)

- ▶ 5 PORTS to accommodate a vast array of sensors
- ▶ Highly accurate & stable
- ▶ Programmable input range
- ▶ Supports low level 10mV & 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

*Specifications are subject to change without notice.*

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

## ORDERING

6661-1248-1	SDI-12 Analog Plus Module
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## SHIPPING

<b>Shipping Height</b>	8 in. (20.4 cm)
<b>Shipping Length</b>	8 in. (20.4 cm)
<b>Shipping Width</b>	3 in. (7.7 cm)
<b>Shipping Weight</b>	4 lbs. (1.8 Kg)