Universal Process Measurement

...SOLVED!

Compatible with virtually all input types!
Thermistor, RTD, Thermocouple, DC, Potentiometer

- High Accuracy
- Requires No Computer or Software
- Simple On-Board Diagnostics
- Universal Power

- Lifetime Warranty
- American Made

Tech Specs

- 18-bit Isolated Universal Analog Output
- High Precision 0.1% Accuracy
- Custom Range Tables
- Sink/Source Output
- 3-way Isolation
- Input capabilities:
  Thermistor, RTD, DC, Potentiometer, Thermocouple

800-942-0315 sales@api-usa.com
www.api-usa.com

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One Model Covers All Common Sensors

Easy Setup—No Computer or Software Needed

Zero and Span Output Calibration Buttons

Full 1200 V Isolation

Input LoopTracker™ LED, Output Test Function

Built-In Loop Power Supply for Sink/Source Output

Applications

- Convert/Isolate DC Sensors for PLC Input, Control and/or Validation
- Interface DC Sensors with Panel Meters, PLCs, Recorders, Data Acq., DCS, & SCADA Systems

Input Types, Field Selectable

DC volts: 35 ranges from ±25 mVDC to ±10 VDC
DC mA: 20 ranges from ±0.5 mADC to ±20 mADC

Potentiometer: 100 ± 0% to 1 Mega ± 0%


Full ANSI temperature ranges

Linearization: 41-55 segments or up to 14th order polynomial

T/C CJC: Automatic

T/C current: Less than 10 µA, including burnout sense

RTDs: 2, 3, 4 wire, 10 Ω to 8000 Ω, RTDs

Universal Input

4 wire with or without current rotation

Cu-10, Cu-100, Ni-100, Ni-120, Ni-Fe-500, Ni-Fe-1000, Ni-Fe-2000, Pt-10, Pt-25, Pt-50, Pt-100, Pt-200, Pt-470, Pt-500, Pt-1000

Thermistors: 44004/44033 2.252 kΩ at 25°C

44005/44034 3.000 kΩ at 25°C

44007/44035 5.000 kΩ at 25°C

44006/44031 10.000 kΩ at 25°C

44008/44032 30.000 kΩ at 25°C

YSI 400 2.252 kΩ at 25°C

Spectrum 1003k 1 kΩ

Custom: Provide sensor specifications, temperature spectrum, and noise pickup reduction.

Dynamic full 3 way isolation (input, output, power) make this module digitally converted (and linearized for temperature sensors), all commonly available sensors.

Microprocessor-based linearization uses 41-55 segments or up to a 14th order polynomial depending on the sensor type.

The input type is set with switches and its range is configured from front buttons, a multimeter and an input simulator.

The output test greatly aids in saving time during initial setup and troubleshooting.

An API exclusive feature includes an output test switch to provide a fixed output (independent of the input) when pressed. The test output greatly aids in saving time during initial setup and troubleshooting.

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Output Sink/Source Versatility

Standard on the APD 8000 is a 20 VDC loop excitation supply for the milliamp output. The output can be selectively wired for sinking or sourcing allowing use with a powered or unpowered milliamp device.

LoopTracker

An API exclusive feature includes a green LoopTracker LED that varies in intensity with changes in the process input signal. It provides a quick visual picture of your process input at all times and can greatly aid in saving time during initial startup and troubleshooting.

The test output level is adjustable from 0 to 100% of the output span.

Options and Accessory

Options—add to end of model number

NCS 5 point NIST traceable calibration certificate*

NC11 11 point NIST traceable calibration certificate*

*Certificate applies to your specified I/O settings. Field changes will void NIST certificate.

Conformal coating for moisture resistance

U Conformal coating for moisture resistance

Reverse acting output

Accessory—order as separate line item

API BP4 Spare removable 4 terminal plug, black