

Strain Gauge, Load Cell, Bridge Alarms, Transmitters, Converters

Amplify, alarm strain gauge sensor signals

- Transmitter for Load Cells, Pressure Sensors
- Interface Weighing Systems
- Convert Strain Gauge Input to DC Signal

Free Factory I/O Setup!

LIFETIME WARRANTY

Info & Applications
api-usa.com/strain

Alarm Models

Field adjustable alarm setpoint(s)
12 turn potentiometer, field adjustable from 0-100% of span
Alarm options: HI, LO, HI/LO, LO/LO, HI/Hi latching, reverse acting, band or inverse band alarm on APD 1530

Factory Configured Models

Specify excitation voltage, sensor mV/V rating, output range, power, and options

Field Rangeable Models

Specify excitation voltage, sensor mV/V rating, output range if factory is to pre-set
Specify power and options
Excitation voltage: Selectable in 1 V increments
Fine adjustment: Multi-turn potentiometer

Input Ranges

Millivolt input range is determined by the sensitivity of the sensor (mV/V) and the excitation voltage applied
 $mV/V \text{ sensitivity} \times \text{excitation voltage} = \text{total mV range}$
Consult factory or see datasheets for calibration resistor options available on certain models

Calibration, Analog Output Models

Multi-turn zero and span potentiometers for output $\pm 15\%$ of span adjustment range

Functional Test Button

Alarm models: Toggles alarm output state
Analog output: Sets output to test level when pressed, adjustable 0-100% of span

Response Time

150 milliseconds typical
See datasheets or consult factory for fast response DF options

Isolation

Alarms: Power to input
Transmitters: 3-way power/input, power/output, I/O
API 4058 and APD 4058 are non-isolated



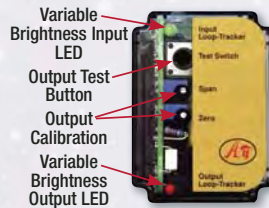
APD 1500 Load Cell Single Alarm

APD 1520 Load Cell Dual Alarm

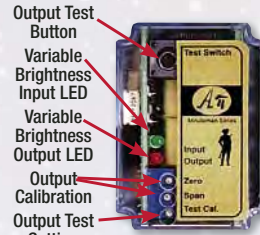
APD 1530 Load Cell Band Alarm



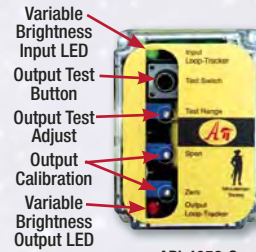
API 4051 G



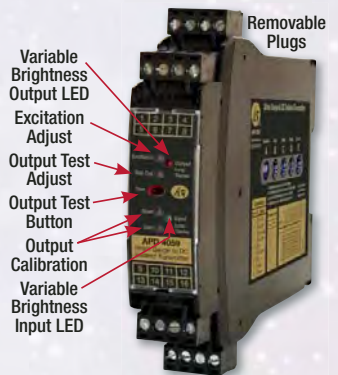
API 4051 G



API 4058 G



API 4059 G



APD 4059

Model	Type	Specify Input Type & Range	Specify Alarm Output Type and Options
APD 1500	DIN	100 Ω to 10 k Ω , 5 to 2000 mV	2 DPST relays, 8 A, 1 HI setpoint, adjustable deadband
APD 1520		1-10 VDC exc., 30 mA max.	2 DPST relays, 8 A, HI/LO setpoints, adjustable deadband
APD 1530		Specify excitation voltage, mV/V	2 DPST relays, 8 A, HI/LO band alarm, adj. deadbands
Model	Type	Specify Input Type & Range	Specify Output Range
API 4051 G I	11 pin plug in	1 350 Ω sensor, 1 to 2000 mV 4-10 VDC exc., 30 mA max. Specify excitation voltage, mV/V	0-1 VDC to 0-10 VDC, ± 1 VDC to ± 10 VDC, 0-1 mA to 0-20 mA 20 V sourcing mA output,
APD 4051	DIN	100 Ω to 10 k Ω , 5 to 2000 mV 1-10 VDC exc., 30 mA max. Specify excitation voltage, mV/V	0-1 VDC to 0-10 VDC, ± 1 VDC to ± 10 VDC, 0-1 mA to 0-20 mA, Connect for sinking or 20 V sourcing mA output
Model	Type	Switch Selectable Input	Switch Selectable Output
API 4058	11 pin plug in	One to four 350 Ω sensors, 5 mV to 1200 mV, 30 mA max., 1-10 VDC excitation	18 switch selectable ranges 0-1 VDC to 0-10 VDC, ± 1 VDC to ± 10 VDC, 0-1 mA to 0-20 mA, 20 V sourcing mA output
APD 4058	DIN	One 350 Ω sensor, 5 mV to 1200 mV, 30 mA max., 1-10 VDC excitation	18 switch selectable ranges 0-1 to 0-10 VDC, ± 1 to ± 10 VDC, 0-2 mA to 0-20 mA, connect for sinking or 20 V sourcing mA
API 4059	11 pin plug in	One to four 350 Ω sensors, 5 mV to 400 mV, 1-10 VDC exc., 120 mA max.	18 switch selectable ranges 0-1 to 0-10 VDC, ± 1 to ± 10 VDC, 0-2 mA to 0-20 mA, 20 V sourcing mA output
APD 4059	DIN	One to four 350 Ω sensors, 5 mV to 400 mV, 1-10 VDC exc., 120 mA max.	18 switch selectable ranges 0-1 to 0-10 VDC, ± 1 to ± 10 VDC, 0-2 mA to 0-20 mA, connect for sink or 20 V sourcing mA
APD 4059 CR	DIN	One to four 350 Ω sensors, 5 mV to 400 mV, 1-10 VDC exc., 120 mA max. Specify calibration resistor value	18 switch selectable ranges 0-1 to 0-10 VDC, ± 1 to ± 10 VDC, 0-2 mA to 0-20 mA, connect for sinking or 20 V sourcing mA



APD 4059 CR with cover removed