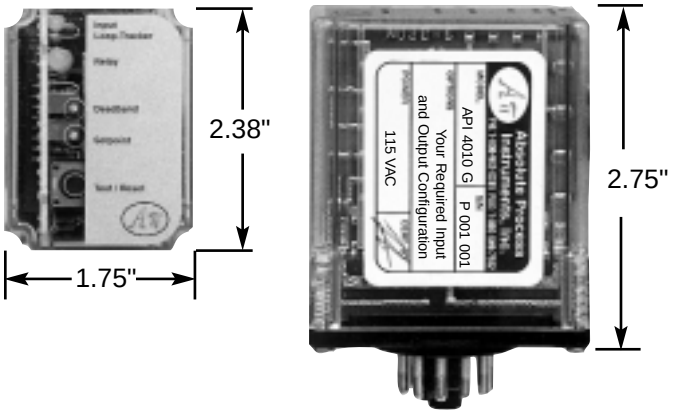
Plug-in Signal Conditioners
NON-ISOLATED
DC to DC Transmitter
API 4010 G

FEATURES

- **Wide Range of Input/Output Parameters**
- **Input/Output LoopTracker™ LED's**
- **Functional Test Pushbutton**
- **Voltage or Current Output**
- **LIFETIME WARRANTY**

CASE DIMENSIONS



Specifications

Input Ranges

	Minimum	Maximum
Current	1mADC	1ADC
Voltage	100mVDC	500VDC

Input Impedance (Voltage)
200K Ohm minimum

Input Voltage Burden (Current)
1.25 VDC Maximum

Output Capability
Voltage: +/-10VDC, +/-10mA max.
Current: 20mADC, 20V Compliance

Linearity
Better than .01% of Span

Response Time
70mSec. Typical

Zero/Span Control Range
+/-15% Typical

Functional Test Pushbutton
50% of Span, (+/-1.5%) of Span when pressed.

Temperature Stability
Better than .02% of Span per °C.

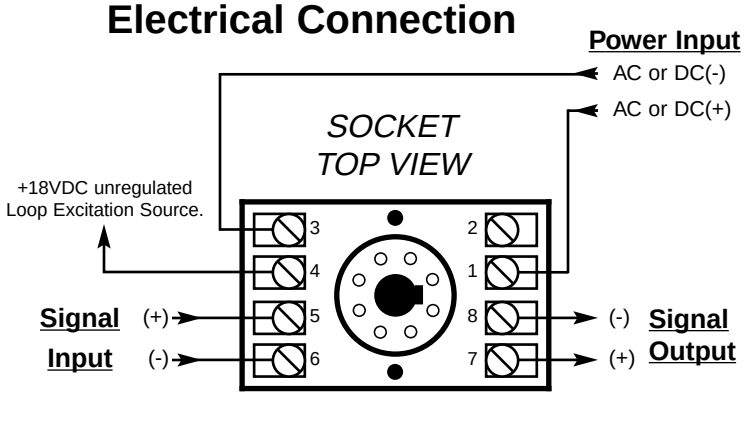
Ambient Temperature Range
-10 to +60 °C (Operating).

Power

Standard:	115VAC +/-10%, 50/60Hz, 2.5W max.
Optional:	230VAC +/-10%, 50/60Hz, 2.5W max.
*	12VAC +/-10%, 50/60Hz, 2.5W max.
*	24VAC +/-10%, 50/60Hz, 2.5W max.
*	12VDC +/-5%, 125mA max.
*	24VDC +/-5%, 65mA max.
*	9-30VDC @2.5W Typical.

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Electrical Connection



FUNCTIONAL DESCRIPTION

The API 4010 G accepts a DC Voltage or Current Input and provides a Non-Isolated DC Voltage or Current Output that is linearly related to the input. Typical applications include Signal Scaling, Signal Conversion, Signal Boosting or a combination of the three. The module Power Supply is transformer isolated from the Input and Output. Standard power is 115VAC; options include 230VAC, 12/24 VDC/VAC or 10-30VDC.

The API 4010 G plugs into an industry standard octal (8-Pin) socket (purchased separately). The socket provided by API (part #API-008) allows for either DIN rail or panel mounting.

OPERATION

The API 4010 G is factory configured to your exact input and output requirements. The input is filtered, either amplified or attenuated as required, then passed through to the output stage. The +18VDC Loop Excitation Supply of the API 4010 G may be used in place of an additional external power source to power passive input devices.

CALIBRATION

The API 4010 G is pre-configured at the factory to the input and output ranges specified when purchased. Top-mounted, multi-turn Zero and Span potentiometers are available should fine-tuning be necessary; however, major range changes will require factory modification. If fine-tuning is necessary, apply the appropriate power to the module and allow a minimum 20 minute warm up time. Using an accurate calibration source, provide an input to the module equal to the minimum required for the application. Using an accurate measurement device for the output, adjust the Zero potentiometer for the exact minimum output desired. Next, set the Input at maximum, then adjust the Span pot for the exact maximum output desired. Repeat adjustments for maximum accuracy. Finally, the Test Pushbutton range may be set to provide the desired Output when depressed.

UNIQUE FEATURES

API Exclusive Features include two ***LoopTracker™ LEDs*** and a ***Functional Test Pushbutton***. The LoopTracker™ LEDs (Green for Input; Red for Output) vary in intensity with changes in the Input (process) signal. Monitoring the state of these LEDs can provide a quick visual picture of your process loop at all times. When held depressed, the Functional Test Pushbutton will provide a fixed output (independent of the input) factory set to approximately 50% of the calibrated output range. Both the ***LoopTracker™ LEDs*** and ***Functional Test Pushbutton*** greatly aid in the reduction of time during initial startup and/or troubleshooting.

RELATED PRODUCTS

The following products are also available for use with a DC Voltage or Current Input. Refer to the appropriate data sheets in this section for details.

API 4010 G EXTSUP
Same as API 4010 G, but "Open Collector" output. Used when a "Sinking" output is required.

API 4050 G
Same as API 4010 G, but Narrow Input Spans

API 4300 G
Same as API 4010 G, but Optically Isolated Input to Output

API 4380 G
Same as API 4300 G, but Field Selectable Inputs and Outputs

API 4380 DIN
Same as API 4380 G, but DIN Style Case; Universal Power 48-300VDC or 80-265VAC

API 4380 DD
Same as API 4380 DIN, but 9-30VDC Power

Various DC Input Single & Dual Setpoint Alarms

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