

DC Input Transmitters, Converters, Isolators

Convert and isolate a non-standard DC voltage or current signal to a standard process signal

- Field Selectable I/O Ranges
- Interface Meters, Recorders, PLCs, DCSs, SCADA, Data Acquisition Systems



Free Factory I/O Setup!

Info & Applications
api-usa.com/dc

Factory Configured Models

Specify input, output range, power, and options

Field Rangeable Models

Specify input and output range if factory is to pre-set.

Specify power and options

Output Zero and Span

Multi-turn potentiometers, ±15% of span adjustment range

Functional Test Button

Sets output to test level when pressed

Potentiometer adjustable 0-100% of span

Isolation

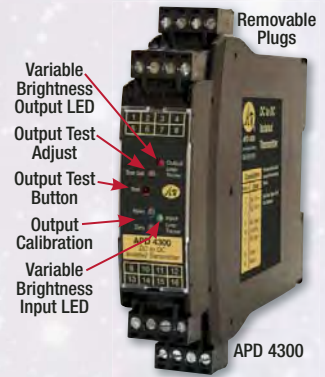
3-way: power/input, power/output, input/output



API 4300



API 4380



APD 4300

Response Time

70 milliseconds typical

APD 4380: 100 milliseconds typical

Model	Type	Specify Input Range	Specify Output Range
API 4300 G	8 pin plug in	0-100 mVDC to 0-300 VDC or 0-1 mA to 0-900 mA, 5A option for 5 Amps connect for sinking or 18 V sourcing mA	0-1 V to ±10 VDC, 0-1 mA to 4-20 mA 20 V sourcing mA, sinking w. EXTSUP option
API 4310 G	8 pin plug in	0-10 mV to 0-500 VDC, ±10 mV to ±10 VDC, 0-100 µA to 0-900 mA, connect for sinking or 18 V sourcing mA	0-1 V to ±10 VDC, 0-1 mA to 4-20 mA 20 V sourcing mA, sinking w. EXTSUP option
APD 4300	DIN	0-100 mV to 0-300 VDC, ±1 V to ±10 VDC, 0-1 mA to 0-900 mA, 0-1 mA to 4-20 mA, connect for sinking or 15 V sourcing mA	0-1 V to ±10 VDC, 0-1 mA to 4-20 mA, connect for sinking or 20 V sourcing mA
APD 4300 PLC	DIN	4-20 mA, connect for sink or 15 V sourcing mA	4-20 mA, connect for sink or 20 V sourcing mA
APD 4393 IsoSplitter	DIN 45 mm	Signal splitter, one input 0-10 mV to 0-100 V, ±50 mV to ±10 V, 0-1 mA to 0-50 mA, connect for sinking or 15 V sourcing mA	Specify 2 independent outputs, 0-1 V to 0-10 V, ±1 V to ±10 V, 0-1 mA to 0-25 mA, connect for sinking or 20 V sourcing mA
Model	Type	Switch Selectable Input	Switch Selectable Output
API 4380 G	8 pin plug in	0-50 mVDC to ±10 VDC, 0-1 mA to 0-20 mA, connect for sinking or 18 V sourcing mA	0-1 V to ±10 VDC, 0-2 mA to 4-20 mA, 20 V sourcing mA
APD 4380	DIN	0-10 mV to 0-130 VDC, ±5 mVDC to ±65 VDC, 0-200 µA to 0-50 mA, connect for sinking or 15 V sourcing mA	0-1 V to 0-10 VDC, ±5 VDC, ±10 VDC, 0-2 mA to 4-20 mA, connect for sinking or 20 V sourcing mA
API 4385	8 pin plug in	-50-0 mV to 20-40 VDC, 0-200 µA to 10-50 mA, connect for sinking or 18 V sourcing mA	0-1 V to ±10 VDC, 0-2 mA to 4-20 mA, 20 V sourcing mA
API 4380 G HV3	8 pin plug in	High voltage input, 2.5 MΩ input impedance 0-20 VDC to 0-200 VDC, ±200 VDC	0-1 V to 0-10 VDC, ±5 VDC, ±10 VDC, 0-20 mA, 4-20 mA, 20 V sourcing mA
APD HV-DC	DIN	High voltage input 8 selectable input ranges + 1 custom, 0-100 VDC to 0-1200 VDC	0-1 V to 0-10 VDC, ±5 VDC, ±10 VDC, 0-2 mA to 4-20 mA, connect for sinking or 20 V sourcing mA



APD 4380



APD 4393 IsoSplitter



Socket Sold Separately

API 4385



APD HV-DC

DC Input Math Modules

Combine multiple inputs or use square root of input

- Add, Subtract, Average, Differential, Combination
- Varied Input Scale Capable
- Square Root for Flow Signals



Free Factory I/O Setup!

Info & Applications
api-usa.com/math

Model	Type	Math Function	Specify Inputs	Specify Output
API 4400 G	11 pin plug in	Output = (A+B+C+D)/4 (average of 4)	Specify input for each channel Specify if percentage of inputs or true math are required 0-100 mV to 0-10 VDC, 0-1 mA to 0-20 mA, sinking mA Consult factory for mixed inputs	0-1 V to ±10 VDC, 0-1 mA to 4-20 mA, 20 V sourcing mA
API 4401 G	11 pin plug in	Output = (A+B+C)/3 (average of 3)		
API 4402 G	11 pin plug in	Output = (A+B)/2 (average of 2)		
API 4403 G	11 pin plug in	Output = (A+B+C-D)/3		
API 4404 G	11 pin plug in	Output = (A+B-C-D)/2		
API 4405 G	11 pin plug in	Output = (A-B-C-D)		
API 4406 G	11 pin plug in	Output = (A+B-C)/2		
API 4407 G	11 pin plug in	Output = (A-B-C)		
API 4408 G	11 pin plug in	Output = (A-B) (differential)		
Model	Type	Math Function	Specify Input	Specify Output
API 4440 G	8 pin plug in	Output is square root of input. Applications include pitot tubes, orifice plates, flow sensors	0-50 mV to 0-200 VDC, 0-1 mA to 0-50 mA connect for sinking or 18 V sourcing mA	0-1 V to ±10 VDC, 0-1 mA to 4-20 mA, 20 V sourcing mA

Factory Configured Models

Specify each input range, output range, power, and options

Output Zero and Span

Multi-turn potentiometers, ±15% of span adjustment range

Functional Test Button

Sets output to test level to 50% when pressed

Response Time

100 milliseconds typical

Isolation

3-way: power/input, power/output, input/output

Math module inputs share common ground



API 4408 G



API 4440 G