

## API DIN Transmitters, Isolators & Alarms

- Wide Choice of Inputs: Volts AC/DC, Amps AC/DC, Process V/mA, Strain, Frequency, RTD, Potentiometer
- Variable Brightness I/O Status LEDs
- 1200V Isolation
- Output Test Button
- Lifetime Warranty

**APD4380**


### SPECIFICATIONS

LoopTracker®:	Variable brightness LEDs indicate I/O level & status
Test Button:	Sets output to test level, toggles relay or resets latching relay
Response Time:	70 msec typical (AC input: 200 msec)
Isolation:	1200 Vrms power/input, power/output, input/output
Input Loop Supply:	15 VDC ±10%, regulated, 25 mA max. (DC & freq inputs)
Temperature:	-10°C to +60°C operating
Power:	80-265 VAC (50/60 Hz), 48-300 VDC standard; 9-30 VDC, 10-32 VAC optional
Dimensions:	0.89" W x 4.62" H x 4.81" D (22.5x117x122 mm)
DC Input Z:	Volts: >200kΩ (>1MΩ on APD4380, >2.5MΩ on APD HV-DC), Current: 50Ω or 1.25 VDC @ 20 mA
AC Input:	40-1000 Hz,
AC Input Z:	Volts: >220kΩ, Current: 10Ω or 1 VDC @ 20 mA
Frequency Input:	Sensitivity ±2.5 mV to ±2.5 V, field adjustable
Frequency Input Z:	10kΩ at max sensitivity, 100kΩ at min sensitivity
Strain Gauge Input:	APD4059: 200kΩ input Z APD1500/20/30: 1MΩ input Z
RTD Input:	100 Pt, 10 Cu, 120 Ni, 1000 NiFe types. Excitation: 10 ma @10Ω, 2 mA @100Ω typical, 100°F (55°C) min. span. Specify 0°C resistance (10-2000Ω), 2- or 3-wire, & alpha (385 typical).
Thermistor Input:	Typically 2kΩ-20kΩ. Specify PTC or NTC, temperature curve & range (°C or °F)
<b>ALARMS:</b>	
Alarm Setpoint(s):	0-100% of span, adjustment front panel accessible
Deadband:	1-100% of span, adjustment front panel accessible
Relay Ratings:	8 A @ 240 VAC resistive, 5 A @ 240 VAC inductive, 8 A @ 30 VDC resistive, 3.5A @30V inductive.
<b>TRANSMITTERS:</b>	
Output Adjust:	Zero & span pots, front panel accessible
Output Loop Supply:	20 VDC nom., regulated, 25 mA max.

### OPTIONS & ACCESSORIES

#### OPTIONS—add to end of model number

##### Transmitters

MO1 In/Out reversal (e.g. 4-20mA in gives 20-4mA out)

##### Factory Set Alarms

L	Single LO going alarms (APD1x00 models)
HH	HI/HI alarms (APD1x20 models)
LL	LO/LO alarms (APD1x20 models)
IB	Alarms between setpoints (APD1x30 models)
HT	Latching alarm with pushbutton reset
HP	Latching alarm with power off reset
R	Reverse acting alarms (relays energized in alarm condition)

##### All Models

D	9-30 VDC, 10-32 VAC power (UL pending)
U	Conformal coating for moisture resistance

#### ACCESSORIES—order as a separate line item

API BP4	Spare removable 4 terminal plug
API TK36	DIN rail, 35 mm W x 39" L, aluminum

### ORDERING INFORMATION

#### DIN TRANSMITTERS & ISOLATORS

##### Field Selectable Range:

Model	Input Range	Output Range
APD 4380	47 switch selectable, 0-10 mVDC to 0-130 VDC, ±5 mVDC to ±65 VDC, 0-200 μADC to 0-50 mADC*	18 switch selectable, 0-1 VDC to 0-10 VDC ±5 VDC to ±10 VDC (10mA max),
APD HV-DC	8 switch selectable, 0-100 VDC to 0-1200 VDC or custom to 2000 VDC**	
APD 6380	28 switch selectable: 0-40 mVAC to 0-300 VAC TRMS, 22 switch selectable: 0-4 mAAC to 0-200 mAAC TRMS	0-2 mADC to 0-20 mADC, 4-20 mADC (20V compliance, 1000Ω @ 20 mA)
APD 4008	Any full-range potentiometer from 0-100Ω to 0-1MΩ, 55 switch selectable, 0-10% to 0-100%	
APD 7580	30 switch selectable, 0-100 Hz to 0-30 kHz, 100 mVrms to 150Vrms	
APD 4059	13 switch selectable: 5 mV to 400 mV; 1-10 VDC exc. for 1-4 350Ω bridge or strain gauge sensors, 120 mA max.	

##### Factory Set Range:

Model	Input Range (specify)	Output Range (specify)
APD 4300	0-100 mVDC to 0-300 VDC, ±100 mVDC to ±10 VDC, 0-1 mADC to 0-900 mADC*	0-1 VDC to 0-10 VDC ±1 VDC to ±10 VDC (10mA max),
APD 6010	0-40 mVAC to 0-300 VAC TRMS, 0-1 mAAC to 0-1000 mAAC TRMS	
APD 4001	RTD (10-2000Ω), or Thermistor (2k-20kΩ), (specify type, curve, °C or °F & range)	0-1 mADC to 0-20 mADC, 4-20 mADC (20V compliance, 1000Ω @ 20 mA)
APD 7010	0-25 Hz to 0-20 kHz, 100 mVrms to 150Vrms	

\* input loop power supply may be connected for sourcing or sinking.  
\*\* not UL recognized.

#### DIN ALARMS

##### Field Selectable Range:

Model	Input Range	Output
APD 1080	24 switch selectable, 0-50 mVDC to 0-10 VDC, ±5 VDC to ±10 VDC, 0-1 mADC to 0-20 mADC*	2 DPST relays, 8A, 1 setpoint
APD 1090	24 switch selectable, 0-50 mVDC to 0-10 VDC, ±5 VDC to ±10 VDC, 0-1 mADC to 0-20 mADC*	2 DPST relays, 8A, 2 setpoints

##### Factory Set Range:

Model	Input Range (specify)	Output (see Options)
APD 1000	0-100 mVDC to 0-300 VDC, 0-1 mADC to 0-20 mADC, 4-20 mADC*	2 DPST relays, 8A, 1 HI setpoint
APD 1020		2 DPST relays, 8A, 2 setpoints HI/LO
APD 1030	0-50 mVAC to 0-300 VAC, 0-1 mAAC to 0-1000 mAAC	2 DPST relays, 8A, 2 setpoints, band alarm
APD 1600		2 DPST relays, 8A, 1 HI setpoint
APD 1620		2 DPST relays, 8A, 2 setpoints HI/LO
APD 1630	RTD (10-2000Ω), or Thermistor (2k-20kΩ), (specify type, curve, °C or °F & range)	2 DPST relays, 8A, 2 setpoints, band alarm
APD 1400		2 DPST relays, 8A, 1 HI setpoint
APD 1420		2 DPST relays, 8A, 2 setpoints, band alarm
APD 1430		2 DPST relays, 8A, 2 setpoints, band alarm
APD 1800	Any full-range potentiometer from 0-100Ω to 0-1MΩ	2 DPST relays, 8A, 1 HI setpoint
APD 1820		2 DPST relays, 8A, 2 setpoints HI/LO
APD 1830		2 DPST relays, 8A, 2 setpoints, band alarm
APD 1700	0-10 Hz to 0-20 kHz, 100 mVrms to 150Vrms	2 DPST relays, 8A, 1 HI setpoint
APD 1720		2 DPST relays, 8A, 2 setpoints HI/LO
APD 1730		2 DPST relays, 8A, 2 setpoints, band alarm
APD 1500	100Ω to 10kΩ bridge, strain gauge, load cell; 5-2000 mV; 1-10 VDC excitation, 30 mA max. Specify excitation voltage, mV range and mV/V	2 DPST relays, 8A, 1 HI setpoint
APD 1520		2 DPST relays, 8A, 2 setpoints HI/LO
APD 1530		2 DPST relays, 8A, 2 setpoints, band alarm

\* input loop power supply may be connected for sourcing or sinking.