

PD659

Signal Isolator, Splitter, Conditioner



PD659-1MA-1MA
Signal Isolator



PD659-1MA-2MA Splitter
The Splitter splits the 4-20 mA output from the PD765 meter into two isolated 4-20 mA outputs.
(Enclosure / meter sold separately)



Multiple PD659s
Shown mounted in a PDA2812-B
NEMA 4X plastic enclosure.
(Enclosure sold separately)

FEATURES

- DIN Rail Mounting
- 1500 V Isolation
- Inputs: 4-20 mA, 0-10 V
- Outputs: 4-20 mA, 0-10 V
- Single Input & Single or Dual Outputs
- 0.1% FS Accuracy
- Operating Temperature Range:
-4 to 131°F (-20 to 55°C)

OVERVIEW

The PD659 series includes DIN mountable models for signal isolation, splitting and conditioning of 4-20 mA and 0-10 VDC signals. As signal isolators, they provide a convenient way to isolate the input signal from the power source and output signal. As splitters, they split one 4-20 mA input into two isolated 4-20 mA outputs. As signal conditioners, they convert either a 4-20 mA input to a 0-10 VDC output or a 0-10 VDC input to a 4-20 mA output.

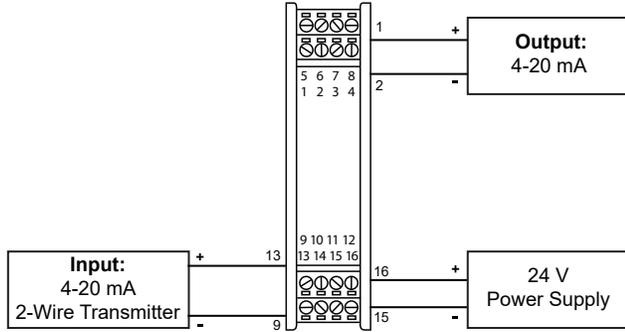
SPECIFICATIONS

Input Ranges: (based on model): 4-20 mA, 0-10 V
Output Ranges: (based on model): 4-20 mA, 0-10 V
Accuracy: 0.1% FS
Power: 24 VDC $\pm 10\%$ @ 50 mA
Isolation: 1500 V AC / 1min (between input-output-power)
Isolation Resistance: $\geq 100 \text{ M}\Omega$ (between input-output-power)
Input Impedance: 50Ω , $\pm 1\%$ for 4-20 mA input and 700Ω
Temperature Drift: 0.005% FS/ $^{\circ}\text{C}$ (-20 to 55°C)
Connections: De-pluggable screw terminals
Isolated Loop Supply (on mA models): 10 V $\pm 10\%$
Maximum Signal Output Current (on mA models): 25 mA
Minimum Signal Output Current (on mA models): 0.3 mA
Response Time: $< 10 \text{ ms}$
Output Load Resistance: $R_L \leq 500 \Omega$ (output current signal),
 $R_L \geq 10 \text{ K}\Omega$ (output voltage signal)
Output Ripple: $\leq 0.5\% \text{ RO}$
Operating Temperature: -4 to 131°F (-20 to 55°C)
Storage Temperature: -4 to 158°F (-20 to 70°C)
Relative Humidity: 0 to 80% non-condensing

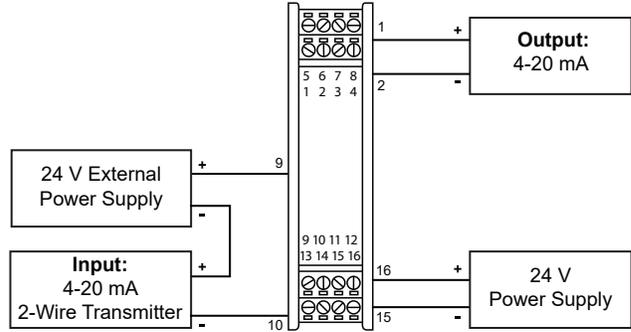
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CONNECTIONS

PD659-1MA-1MA SIGNAL ISOLATOR (One 4-20 mA Input and One 4-20 mA Output)

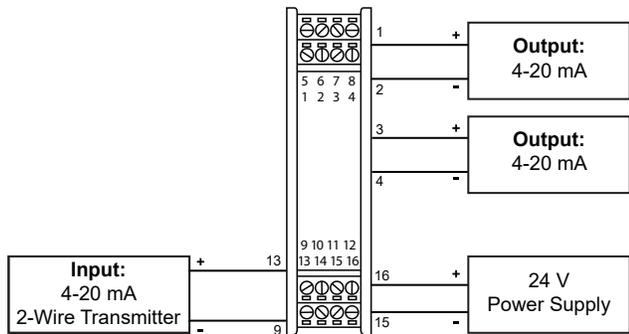


Signal Isolator powering 2-wire transmitter input

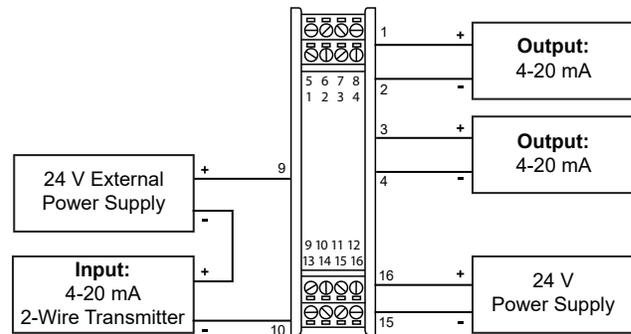


External power supply powering 2-wire transmitter input

PD659-1MA-2MA SIGNAL SPLITTER (One 4-20 mA Input and Two 4-20 mA Outputs)

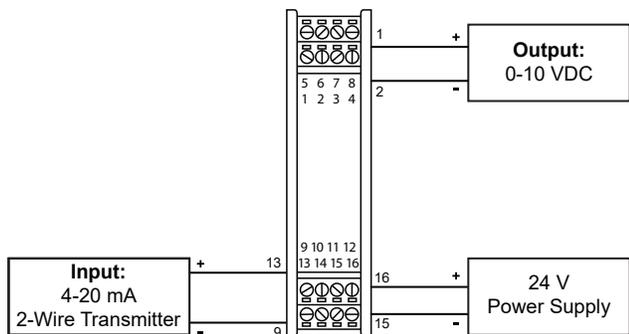


Signal Splitter powering 2-wire transmitter input

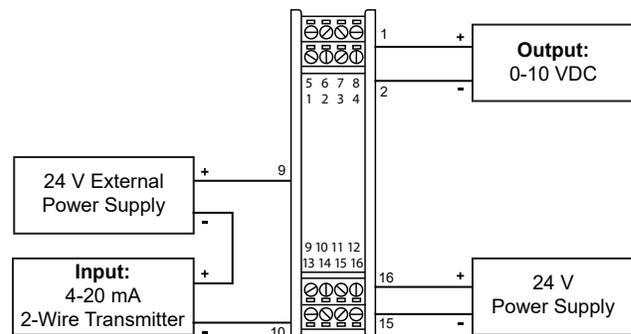


External power supply powering 2-wire transmitter input

PD659-1MA-1V SIGNAL CONDITIONER (One 4-20 mA Input and One 0-10 VDC Output)



Signal Conditioner powering 2-wire transmitter input

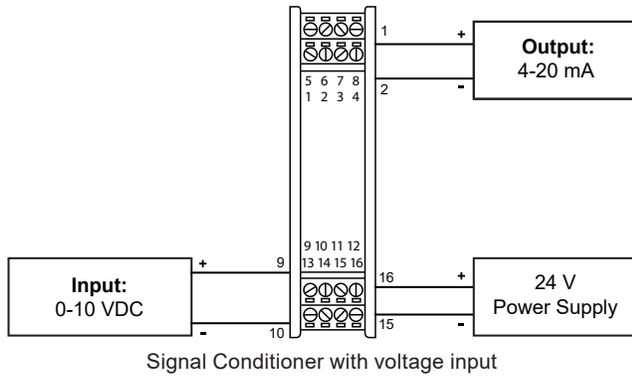


External power supply powering 2-wire transmitter input

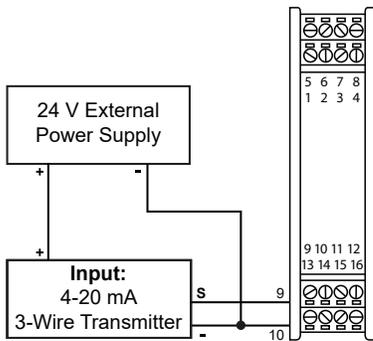
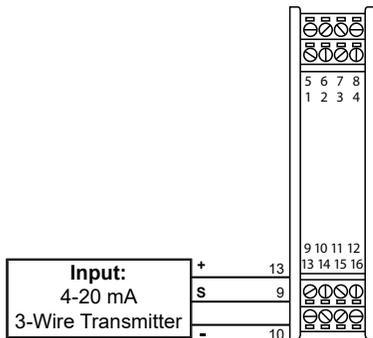
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CONNECTIONS (continued)

PD659-1V-1MA SIGNAL CONDITIONER (One 0-10 VDC Input and One 4-20 mA Output)



Three-Wire Transmitter Connections



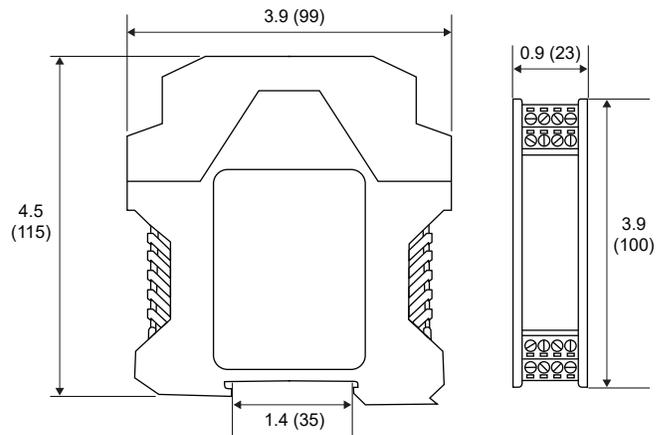
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DIMENSIONS

Units: Inches (mm)



ORDERING INFORMATION

PD659 Signal Conditioner	
Model	Description
PD659-1MA-1MA	Signal Isolator with One 4-20 mA Input and One 4-20 mA Output
PD659-1MA-2MA	Signal Splitter with One 4-20 mA Input and Two 4-20 mA Outputs
PD659-1V-1MA	Signal Conditioner with One 0-10 VDC Input and One 4-20 mA Output
PD659-1MA-1V	Signal Conditioner with One 4-20 mA Input and One 0-10 VDC Output

Enclosures	
Enclosure Series	Description
PDA2300	Economical NEMA 4X Plastic
PDA2500	NEMA 4X Plastic
PDA2600	NEMA 4X Stainless Steel
PDA2700	NEMA 4X Steel
PDA2800	Smallest Footprint NEMA 4X Plastic
PDA3400	Internally Mounted NEMA 4X Plastic

Accessories	
Model	Description
PDA1002	6" DIN Rail Mounting Kit (for mounting on enclosure back plates)
PDA1003	7" DIN Rail Mounting Kit (for mounting in PDA2811/PDA2812)
PDA1024-01	24 VDC Transmitter Power Supply

WARNING

Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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