

Programmable High Density Din Rail Transmitters

JUST-PC™ TECHNOLOGY

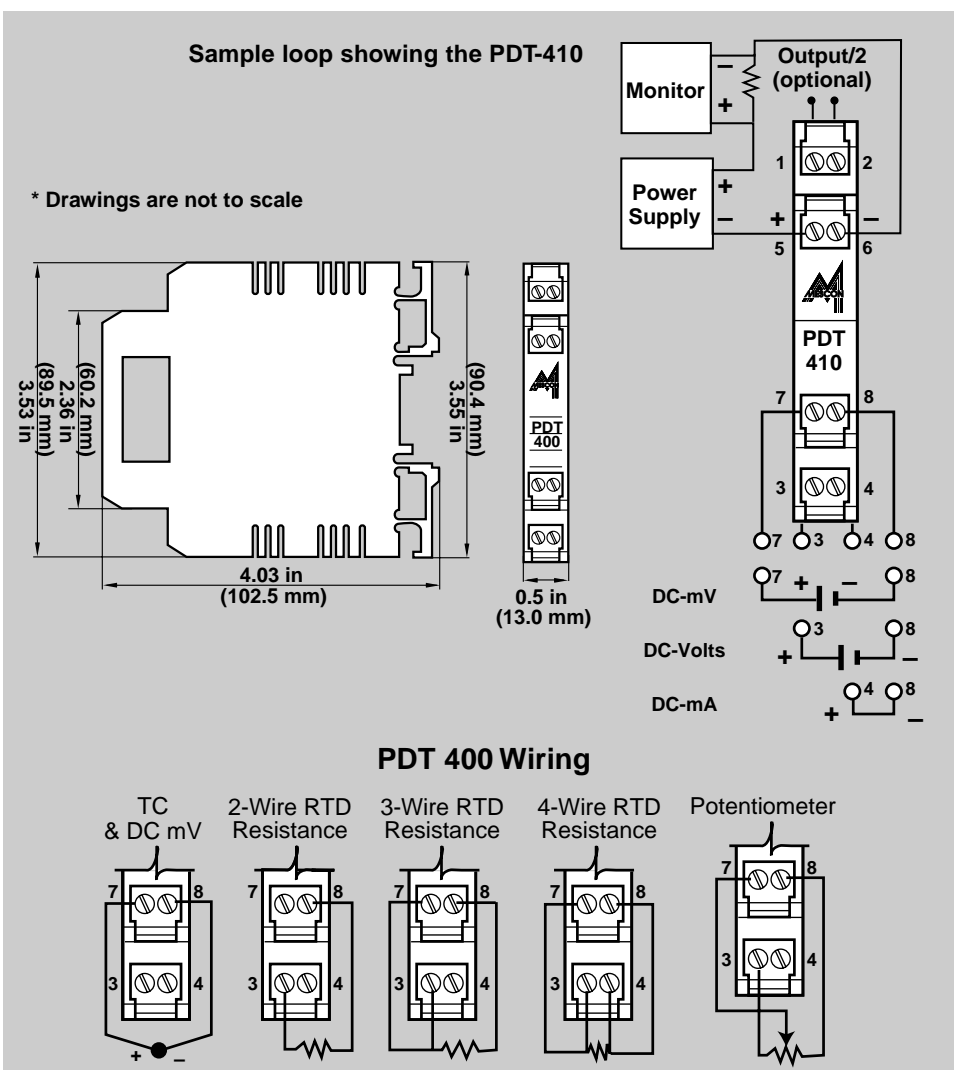
Series PDT-400



The Mescon PDT-400 series is a unique PC-programmable 2-wire transmitter family. The units feature a state of the art micro-processor based design which enables complete configuration with Mescon's JUST-PC™ Technology using the MESCONfigurator™, user friendly configuration software. This eliminates the need for power supplies, calibrators, screw-drivers, wires, jumpers and hand-held programmers. The PDT-400 is the DIN rail mounted version of an entire family of products. Other Just-PC technology™ instruments are available for thermal-head, field-mount, high density Din rail and Digital display applications.

STANDARD FEATURES:

- JUST-PC™ Configuration Technology. No power supply needed for programming
- MesConfigurator™ user friendly software
- Full software programmability of sensor type and input range
- Linearized 4-20mA output for T/C, RTDs, mV, Potentiometers and Resistance Inputs
- 2000 Volts I/O isolation
- Ultra High Density DIN rail mounting
- Custom Linearization in minutes
- Optional dual output capability
- RFI/EMI Protected, CE marked



MESCON
Technologies, Inc.

9318 Gulfstream Road • Suite A • Frankfort, IL. 60423 • Telephone: 815-464-5004 • Fax: 815-464-5003
E-Mail Address: mescon@mescontec.com • Web Site: www.mescontec.com

Programmable High Density Din Rail Transmitters

JUST-PC™ TECHNOLOGY

Series PDT-400

Configuration: All Input types and range parameters are easily configurable with Mescon's user friendly **JUST-PC™** Technology, which requires no power supply for configuration using the PA-400 programming adapter and the **MESCONfigurator™** Graphic User Interface software under Windows® operating systems through the PC's RS232 serial port.

SPECIFICATIONS:

INPUT CONFIGURATIONS

Thermocouples	Most standard types and all special types using customer defined tables and polynomials. (PDT-400)
RTD	2, 3, and 4 wire, Pt-100, Callandar-Van-Dusen adaptation, User defined sensor types available. (PDT-400)
Potentiometers	to 20 K Ω (PDT-400)
Resistance	to 400 Ω (PDT-400)
DC-mV	-10 to 100 mV (PDT-400)
DC-mV	-30 to 300 mV (PDT-410)
DC-Volts	Up to 10 Volts (PDT-410)
DC-mA	Up to 50 mA (PDT-410)

GENERAL SPECIFICATIONS

Minimum Range	2 mV. Limited mostly by input signal quality.
Output	4-20mA isolated loop powered.
Supply Voltage	9-40 VDC (@ no load). Reverse polarity protected.
Maximum Load	$R_{max} = (V_{supply} - 9V) \div 20mA$
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C
Humidity	0-95% RH, non-condensing.
Response Time	0.3 seconds, to 90% of input. (> 3 updates per second).

GENERAL SPECIFICATIONS (continued)

Damping Factors	Programmable 0.0 to 64.0 seconds, to 0 - 120% of input range, using MESCONfigurator™ software interface.
Stability	Better than $\pm 0.1\%$ of span for 12 months.
I/O Isolation	2000 VDC or peak AC.
RFI Protection	< 1% effect of span at 20-1000 MHz and at field strength of 20V/m. $\text{C} \text{E}$ marked.

PERFORMANCE SPECIFICATIONS

Output Resolution	0.015% of span (2.5 μ A).
Output (D/A) Linearity	Better than 0.02% of output span.
Sensor Linearization	Better than 0.1°C for RTDs. Better than 0.2°C for T/C.
Cold Junction Compensation	Automatic to within $\pm 0.5^\circ\text{C}$ for all T/C.
Temperature Stability	0.012%/°C combined ZERO and SPAN.
Supply Voltage Effect:	< $\pm 0.002\%$ per volt
Calibration	Automatic. Unit includes all of the calibration parameters. It performs periodic "ZERO", "SPAN", self-test, and auto calibration.
Input Linearity	Better than 0.01% of span (mV input).

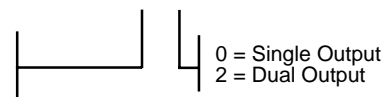
All specifications are subject to change without notice.

ORDERING INFORMATION

PDT - 4 X X

PDT 4 X X

0 = Temp
1 = DC - mA - mV - V
3 = Frequency
4 = Thermistor



PA - 400

Programming Adapter (RS232)

Windows® is a registered trademark of Microsoft Corporation.



MESCON
Technologies, Inc.

Tel: 815-464-5004 • Fax: 815-464-5003
E-Mail Address: mescon@mescontec.com
Web Site: www.mescontec.com

Distributed By: