

LOW-COST PROCESS METER

DART Model PD602



SPECIFICATIONS

Except where noted all specifications apply to operation at +25°C.

INPUTS: 4-20 mA DC, 0-5 VDC, 1-5 VDC, or 0-10 VDC

DISPLAY: 0.56" (14 mm) high, red or green LED, 3 1/2 digit (± 1999)

ACCURACY: $\pm 0.05\%$ of calibrated span ± 1 count

CALIBRATION RANGE: Low input (e.g. 4 mA): -500 to 500
High input (e.g. 20 mA): 20 to 2000 above low input display

DECIMAL POINT: Jumper selectable up to three decimal places

INPUT IMPEDANCE: Voltage ranges: greater than 200 k Ω
Current ranges: 10 Ω

DISPLAY UPDATE RATE: 2.5/second

OVERRANGE & UNDERRANGE: Displays $\bar{1}$ and $\bar{-1}$ respectively

TEMPERATURE DRIFT: 100 PPM/°C from 0 to 65°C ambient

RECALIBRATION: Recommended at least every 12 months

POWER: 115 or 230 VAC $\pm 10\%$, 50/60 Hz, 3 W (factory set)

Optional: 12-36 VDC, 12-24 VAC, 6 W

Optional: 85-265 VAC, 50/60 Hz, 90-265 VDC, 20 W

TRANSMITTER POWER SUPPLY: 24 VDC $\pm 10\%$ @ 200 mA maximum (Optional)

FUSE: Recommended external fuse: 1 A, 250 V slow-blow

NORMAL MODE REJECTION: 62 dB at 50/60 Hz

COMMON MODE REJECTION: 120 dB at 50/60 Hz

ISOLATION: 4 kV

ENVIRONMENTAL: Operating temperature range: 0 to +65°C

Storage temperature range: -40 to +85°C

Relative humidity: 0 to 90% non-condensing

CONNECTIONS: Screw terminals, accept 12 to 26 AWG wire

ENCLOSURE: 1/8 DIN, high impact plastic, UL 94V-0, color: gray

FRONT PANEL: NEMA 4X, IP65. Panel gasket provided

MOUNTING: 1/8 DIN panel cutout required. Two panel mounting bracket assemblies provided

PANEL THICKNESS: 0.04" - 0.25" (1.0 mm - 6.4 mm).

Recommended minimum panel thickness to maintain NEMA 4X rating: 0.06" (1.5 mm) steel panel, 0.16" (4.1 mm) plastic panel

TIGHTENING TORQUE: Screw terminal connectors: 4.5 lb-in (0.5 Nm)

OVERALL DIMENSIONS: 2.45" x 4.68" x 4.19"
(62 mm x 119 mm x 106 mm) (H x W x D)

WEIGHT: 8.0 oz (227 g)

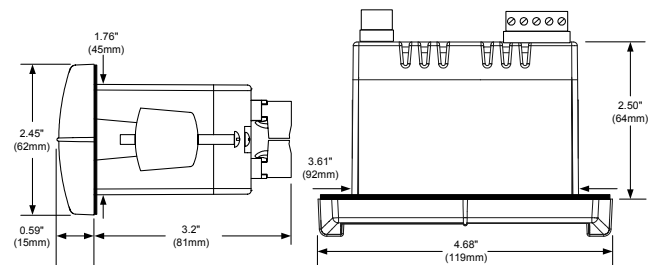
WARRANTY: 1 year parts and labor

EXTENDED WARRANTY: Warranty may be extended an additional 12 months by returning the Product Registration Form within 2 months from date of purchase. Go to www.predig.com for online registration.

FEATURES

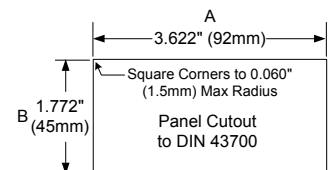
- 4-20 mA, 0-5 VDC, 1-5 VDC, or 0-10 VDC Inputs
- Calibrate from Front Panel
- Non-Interactive Field-Scaling in Engineering Units
- 3 1/2 Digit Display, 0.56" (14 mm) High, Red LEDs
- NEMA 4X, IP65 Front
- Shallow-Depth Case
- 115 VAC or 230 VAC Power Models (Factory Set)
- 12-36 VDC, 12-24 VAC Power Option
- 24 VDC Transmitter Power Supply Option
- Green Display Option

MOUNTING DIMENSIONS



Panel Mounting Instructions

1. Remove the two mounting brackets provided with the meter (back-off the two screws so that there is 1/4" (6.4 mm) or less through the bracket. Slide the bracket toward the front of the case and remove).
2. Insert meter into the panel cutout.
3. Install mounting brackets and tighten the screws against the panel. To achieve a proper seal, tighten the mounting bracket screws evenly until meter is snug to the panel along its short side.
DO NOT OVER TIGHTEN.



Tolerances:
A: +0.032 (+0.8mm)
-0.000 (-0.0mm)
B: +0.024 (+0.6mm)
-0.000 (-0.0mm)

Your Local Distributor is:

PRECISION DIGITAL CORPORATION

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SAFETY INFORMATION



CAUTION: Read complete instructions prior to installation and operation of the meter.



WARNING: Risk of electric shock. Observe all safety regulations. Electrical wiring should be performed in accordance with all applicable national, state, and local codes to prevent damage to the meter and ensure personnel safety.



WARNING

Hazardous voltages exist within enclosure. Only trained service personnel should perform installation and service.

SETUP

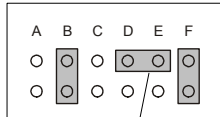
All operations are performed with the meter in the case.

Input Signal & Decimal Point Selection

The input signal and the decimal point are selected by the jumper array located at the rear of the meter, next to the signal connector. The label affixed to the case shows the jumper location and configuration for the selected input signal.

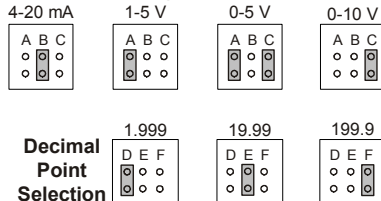
JUMPER ARRAY

Default Configuration
4-20 mA & 199.9 DP



Spare Jumper

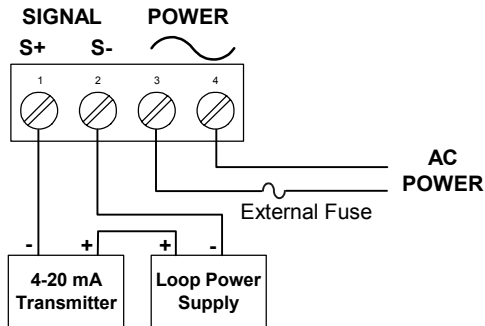
Input Signal Selection



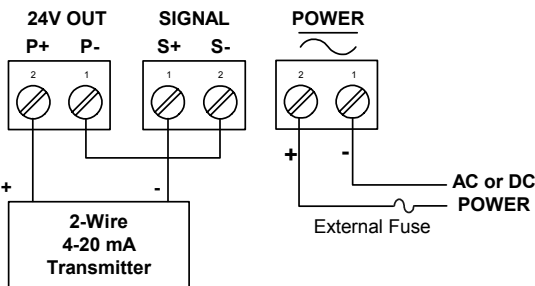
Connections

All connections are made to removable screw terminal connectors located at the rear of the meter.

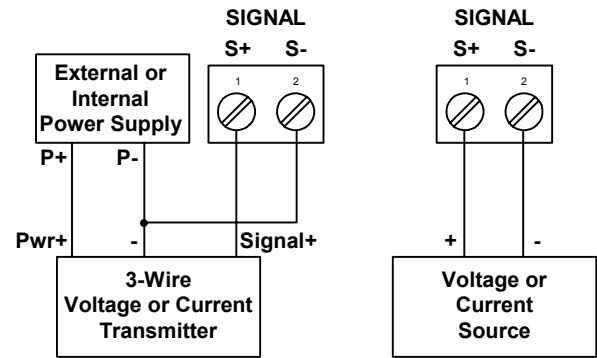
The label affixed to the case shows the location of all connectors available with requested configuration.



Meter powered from 115 or 230 VAC
Transmitter powered by external power supply



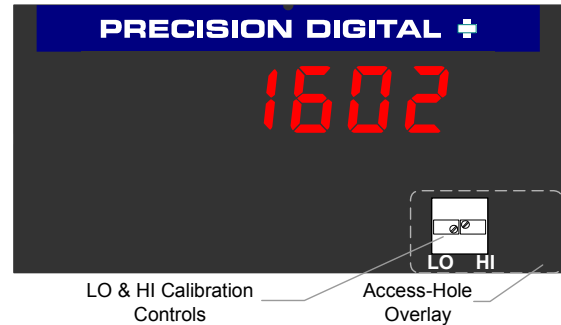
Meter powered from universal supply
Transmitter powered by internal power supply (optional)



Three-Wire transmitter & voltage or current source connections

Calibration/Scaling

The LO and HI calibration controls are located behind the faceplate. The calibration controls may be reached through an access-hole on the faceplate. After the calibration has been completed, use the overlay provided to cover the access-hole to maintain NEMA 4X protection.



1. Apply low input signal (e.g. 4 mA) and adjust the LO calibration control for desired display reading.
2. Apply high input signal (e.g. 20 mA) and adjust the HI calibration control for desired display reading.
3. Complete the calibration by making any minor adjustments to the LO and HI displays.
4. Remove adhesive backing from the overlay provided and apply to the faceplate to cover the access-hole for the calibration controls.

Three access-hole overlays are provided with each meter. When recalibrating the meter, use a new overlay as necessary to maintain NEMA 4X protection.

ORDERING INFORMATION

115 VAC Model	230 VAC Model	85-265 VAC* Model	12-36 VDC* Model
PD602-3R0-0	PD602-4R0-0	PD602-6R0-1	PD602-7R0-0
PD602-3G0-0	PD602-4G0-0	PD602-6G0-1	PD602-7G0-0

Models with "G" in the part number refer to green LED option.

Models with "-1" in the part number refer to 24 VDC transmitter power option.

*These models may be powered from AC or DC, see Specifications for details.

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