

# 3½+ DIGITS NEMA 4X LOOP-POWERED PROCESS METER

## Survivor • Model PD662



**Survivor**

## FEATURES

- 4-20 mA Input
- 3½+ Digit 0.6" Display
- Easy Four-Button Programming
- NEMA 4X Enclosure
- Programmable Noise Filter
- Loop-Powered Backlight Option
- Max/Min Display
- HART® Protocol Transparent
- 1.7 V Drop without Backlight
- CSA Certified for -40 to 75°C Operation (-55 to 75°C with Heater Option)
- 32-Point and Square Root Linearization Functions

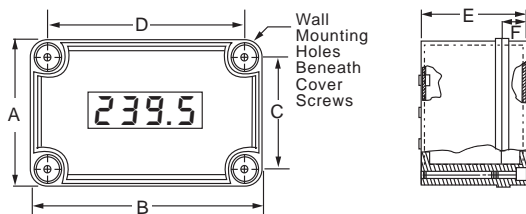
## INTRODUCTION

The PD662 NEMA 4X, CSA Certified loop-powered meter is perfect for applications where a simple, inexpensive display is required and AC power is not available. The PD662 derives all its power from the 4-20 mA loop. The PD662 is scaled using four push buttons and can be done without applying an actual calibration signal. The PD662's display will read up to 2999; we call this 3½+ digits! The loop-powered backlighting option lets you see the display under any lighting condition and is powered completely from the 4-20 mA loop. This means there is no need for additional wiring and never any batteries to change. The PD662 is housed in a rugged NEMA 4X enclosure and is provided with one ½" NPT pipe conduit hole. The PD662 is also available with an optional DC-powered heater that allows the PD662 to operate in temperatures as low as -55°C.



Actual Size Digits

## DIMENSIONS



Units: Inches (mm)

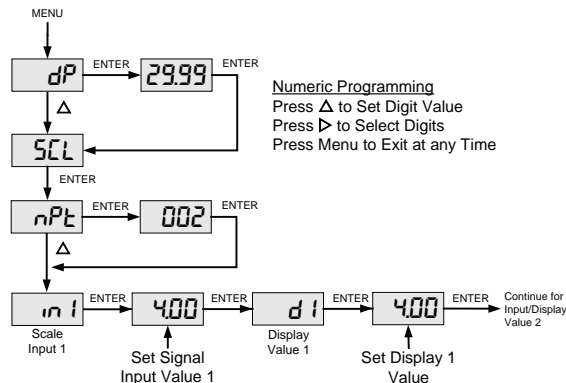
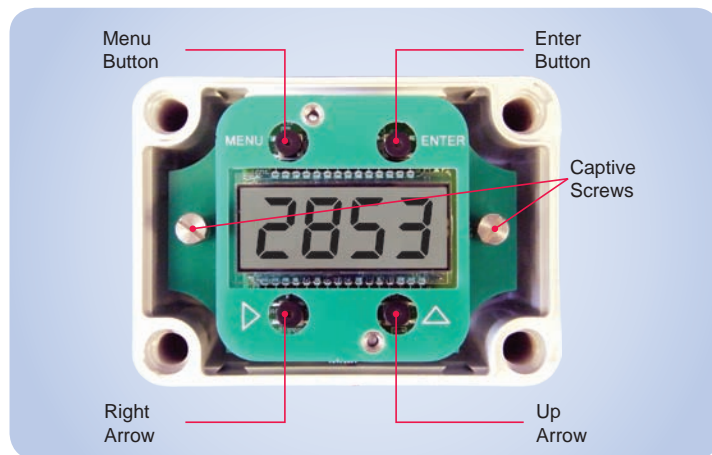
A: 3.15 (80) C: 2.44 (62) E: 2.76 (70); 3.35 (85) with heater option  
 B: 4.33 (110) D: 3.62 (92) F: 0.79 (20); 1.38 (35) with heater option

## QUICKSTART

The PD662 is designed to be easily wired into your current loop and quickly programmed.

## Programming

The PD662 Survivor comes calibrated and scaled at the factory to display a 4.00 to 20.00 mA signal on startup. To change the scaling, follow along using the 4 button interface.



PD662 Menu Progression

**SPECIFICATIONS**

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

**General**

- Display:** 0.6" (15.24 mm) LCD, 3½+ digits; -1999 to 2999
- Display Update Rate:** 2 Updates/Second
- Over-Range:** Display Flashes 2999
- Under-Range:** Display Flashes -1999
- Programming Method:** 4 Internal Pushbuttons
- Noise Filter:** Programmable HI, LOW, or OFF
- Recalibration:** Recalibration is recommended at least every 12 months.
- Max/Min Display:** Max/Min readings reached by the process are stored until reset by the user or until power to the meter is turned off.
- Non-Volatile Memory:** All programmed settings are stored in non-volatile memory for a minimum of ten years if power is lost.
- Normal Mode Rejection:** 64 dB at 50/60 Hz
- Environmental:** Operating Temperature for CSA Certification: -40 to 75°C. Functional Temperature Range: -40 to 85°C. Storage Temp.: -40 to 85°C. Relative Humidity: 0 to 90% non-condensing.
- Connections:** Removable screw terminals accept 12 to 22 AWG
- Tightening Torque:** Screw terminal connectors: 4.5 lb-in (0.5 Nm)
- Enclosure:** Impact-resistant polyester plastic, body color gray, clear cover with blue faceplate; NEMA 4X, IP66; ½" conduit hole provided at base
- Weight:** 9.3 oz (264 g)
- Overall Dimensions:** 3.15" x 4.33" x 2.76" (80 mm x 110 mm x 70 mm) (W x H x D)
- Warranty:** 3 years parts & labor

**Input**

- Input:** 4-20 mA
- Accuracy:** ±1 count
- Function:** Linear (2 to 32 points) or square root
- Temperature Drift:** 50 PPM/°C from -40 to 85°C ambient
- Decimal Point:** User selectable decimal point
- Minimum Span:** Input 1 & Input 2: 0.40 mA
- Maximum Voltage Drop:** 1.7 VDC @ 20 mA; 3.7 VDC @ 20 mA with backlight option.
- Equivalent Resistance:** 85 Ω @ 20 mA without backlight; 185 Ω @ 20 mA with backlight
- Loop-Powered Backlight Option:** Factory installed only with field wiring option. Powered directly from the 4-20 mA loop, no batteries required. The display brightness will increase as the input signal current increases.

**Heater Option**

- Power:** 24 VDC, 11 W Maximum.
- Required Switch & Fuse: A CSA Approved fuse rated min 30 VDC, 1 A, T and a readily accessible switch or a circuit breaker shall be provided to facilitate the disconnection of power to the heater.
- Environmental:** Operating Temperature for CSA Certification: -55 to 75°C. Functional Operation: -55 to 85°C. Storage Temperature: -55 to 85°C. Relative Humidity: 0 to 90% non-condensing.
- Temperature Cutoff:** Internal 104°C thermal cutoff for over temperature protection.

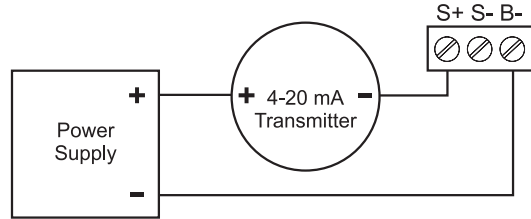
**CSA Certification**

- CSA Certified:** U.S. & Canada. 2252 05 – Process Control Equipment. 2252 85 – Process Control Equipment, U.S. Standards.
- CSA File Number:** 157123
- CSA Applicable Requirements:** CAN/CSA C22.2 No. 61010-1-04 Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements UL 61010-1:2004, 2nd Edition Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements.

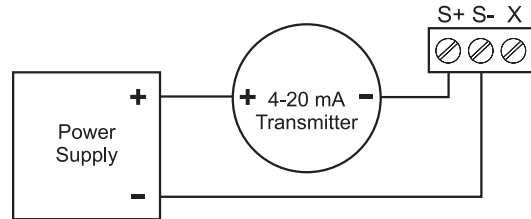
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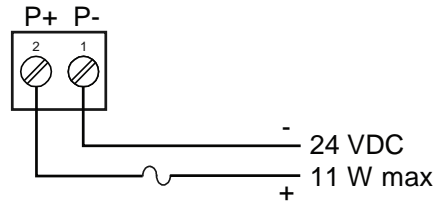
**CONNECTIONS**



**PD662 Input Connections with Backlight**



**PD662 Input Connections without Backlight**



**PD662 Heater Connections**

**ORDERING INFORMATION**

Survivor • Model PD662 Loop-Powered Process Meter	
Model	Options Installed
PD662-0L0-00*	None
PD662-0K0-00	Backlight
PD662-0L0-A0	Heater
PD662-0K0-A0	Backlight + Heater

\* Quick Shipment Program product, typically shipped within 2 working days

Accessories	
Model	Description
PDA6624	Panel Mounting Kit
PDA6845	2" Pipe Mounting Kit



**Your Local Distributor is:**  
Order from:

**C A Briggs Company**

622 Mary Street; Suite 101  
Warminster, PA 18974

Phone: 267-673-8117 - 800-352-6265

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