Learn How the New Loop Leader is the Loop-Powered Meter For You
Webinar Presenter

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What You Will Learn in This Webinar

- What are loop-powered meters?
- Why use loop-powered meters?
- What makes PDC’s new Loop Leader a great product?
What are Loop-Powered Meters?
By definition, loop-powered meters are meters that are powered off the 4-20 mA loop and therefore require no additional power.

The diagram above shows a typical 4-20 mA loop consisting of a power supply, a transmitter and a PLC.

This diagram shows how a loop-powered meter can be installed in an existing loop just by breaking the loop in a convenient place and wiring it in. No extra power needed.
What are Loop-Powered Meters?

Available in Several Packages

Panel Mount Loop-Powered Meters
- PD6602/6
- PD6603/7
- PD6604/8
- PD6622/26
- PD6624/28

Explosion-Proof Loop-Powered Meters
- PD663
- PD6800
- PD6801
- PD6820
- PD6870

NEMA 4X Loop-Powered Meters
- PD6700
- PD6701
- PD6720
- PD6770
Why Use Loop-Powered Meters?
Why Use Loop-Powered Meters?

- Line-powered meters require a separate AC or DC power supply to power them.
- Loop-powered meters install simply just by breaking the loop and connecting only two wires.

Easier to Install than Line-Powered Meters

Four Connections for a Line-Powered Meter

Only Two Connections for a Loop-Powered Meter
The level in this tank is being displayed on a loop-powered meter that does not require any additional power other than that provided by the loop.

The Loop Leader level meter (shown below) has the same exact display as the loop-powered meter installed at the side of the tank (shown on the left).
The Loop Leader with bargraph provides an easy-to-read visual indication of how full this tank is.

The Loop Leaders in the above picture provide a more convenient way for reading the information from the transmitters on the top of the tanks.
Why Use Loop-Powered Meters?

More Reasons

- Transmitters that do not display total
- Transmitters up in rafters or down in the floor
- Transmitters located in dimly lit areas
- Transmitters on top of tanks
What Makes The Loop Leader Great?

- 1.5 Volt Drop
- Red Backlight for Alarm
- NEMA 4X Front Panel
- -40 to 167°F (-40 to 75°C) Safe Area Operating Temperature Range
- Free PC-Base USB Programming Software
- Two Open collector Outputs
- Optional Solid-State Relays
- Optional 4-20 mA Analog Output
- Conformal Coated PCBs
- Hazardous Area Versions Available
Great Product

The Display Makes All The Difference!

PD6602/06
Decimal Display

✓ 5-Digit Alphanumeric Top Line
✓ 8-Digit Alphanumeric Bottom Line

PD6604/08
Decimal Display with Bargraph

✓ 5-Digit Alphanumeric Top Line
✓ 8-Digit Alphanumeric Bottom Line
✓ 20-Segment Bargraph w/Numeric Percent

PD6603/07
Feet & Inches Display

✓ Feet & Inches Top Line
✓ 8-Digit Alphanumeric Bottom Line
✓ 20-Segment Bargraph w/Numeric Percent
Two Display Types for Loop Leader Rate/Totalizers

- **PD6622/26**
  - Decimal Display
  - 5-Digit Alphanumeric Top Line
  - 8-Digit Alphanumeric Bottom Line

- **PD6624/28**
  - Decimal Display with Bargraph
  - 5-Digit Alphanumeric Top Line
  - 8-Digit Alphanumeric Bottom Line
  - 20-Segment Bargraph w/Numeric Percent
Great Product

Red Backlight for Alarm Conditions with Flashing Message

- Red Backlight for Alarms
- Programmable Flashing Display for Alarms
- Toggles Between Units & Custom Alarm Message
- Alarm Indicator

9630 GALLONS
Users can use the dual-scale feature to show the input in two different scales.

This Loop Leader rate/totalizer is displaying input in gallons per minute and cubic feet per minute.
The Loop Leader’s two solid state relays can be used for a variety of applications, including the pump control application shown below.

- Alternate two pumps
- High and low level alarm indication
- Alternate on level and run time
- Display pump run times or number of times they have cycled
- Intrinsically safe and nonincendive

Relay #2 turns the main pump on at 8.5 Feet and turns it off at 3.5 Feet.
With the Pump Alternation feature activated, the next time the level reaches 8.5 Feet, relay #1 transfers and starts the backup pump.
Great Product

Loop-Powered Relays for Control Applications

If the backup pump is not able to keep up, and the level reaches 13.0 Feet, relay #2 transfers and starts the main pump as well.
Open Collector #1 trips the High Level Alarm at 14.0 Feet and causes the display to turn red and flash a HI LEVEL alarm message. The HI alarm resets at 8.5 Feet.
Open Collector #2 trips the Low Level Alarm at 1.0 Foot and causes the display to turn red and flash a LO LEVEL alarm message. The LO alarm resets at 3.5 Feet.
The Loop Leader not only can display flow rate and total at the same time, but it can also toggle between rate/total and their units.
Great Product

Only Adds 1.5V to Heavily Burdened Loops
Great Product

Loop-Powered Relays for a High or Low Alarm Trip
The Loop Leader can be used as a loop-powered loop isolator… with the added benefit of a digital display!
MeterView XL Programming Software

- Easy Programming of Features
- Packed Product

- USB Connection Provides Power During Programming

- Save & Print Configuration Files without Meter Connected

- Micro USB Cable Provided
Main window displays image of connected meter, model number, readings, and status.

Input/Scale window is used to set the input, enable or disable totalizer or dual-scale feature, and scale the input.
✓ Relay and Open Collector Output windows are used to assign a specific task to the 2 relays/OCs such as pulse, alarm, timer, total reset, stopwatch, or off.

✓ 4-20 mA Output window is used to program the isolated 4-20 mA output’s source, range and overage values.
ATEx: II 1G, Ex ia IIC T4 Ga, Ta = -40°C to +70°C
Certificate number: CML 17ATEX2015X
IECEx: Ex ia IIC T4 Ga, Tamb = -40°C to +70°C
Certificate number: IECEx CML 17.0008X

UL & C-UL Listed as Intrinsically Safe and Nonincendive:
Class I, Division 1, Groups A, B, C and D T4
Class I, Division 2, Groups A, B, C and D T4
Ex ia IIC T4 (Canada); Class I Zone 0, Zone 1,
AEx ia IIC T4 (U.S.)
Class I Zone 2, Group IIC T4 (U.S.)
PROCESS CONTROL EQUIPMENT FOR USE IN HAZARDOUS LOCATIONS

UL & C-UL 61010 Listed for Electrical Safety and Type 4X Environmental:
Standards for Safety:
IEC 61010-1:2010 (3rd Edition);
UL 61010-1, 3rd Edition;
CAN/CSA-C22.2 No. 61010-1-12, 3rd Edition;
Additional Standards: UL 50E
<table>
<thead>
<tr>
<th><strong>NEW</strong></th>
<th><strong>OLD</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price</strong></td>
<td>Starting at $194</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Dual-Line</td>
</tr>
<tr>
<td><strong>Feet &amp; Inches Display</strong></td>
<td>Available</td>
</tr>
<tr>
<td><strong>Number of Digits</strong></td>
<td>Five &amp; Eight</td>
</tr>
<tr>
<td><strong>Number of Digits for Total</strong></td>
<td>Eight (13 Using top line)</td>
</tr>
<tr>
<td><strong>Digit Height</strong></td>
<td>0.70&quot;</td>
</tr>
<tr>
<td><strong>Engineering Units/Tags</strong></td>
<td>8 Alphanumeric Characters</td>
</tr>
<tr>
<td><strong>Pre-Defined Engineering Units</strong></td>
<td>Standard Feature</td>
</tr>
<tr>
<td><strong>Bargraph</strong></td>
<td>Vertical, 20-Segment, with Numeric Percentage Display</td>
</tr>
<tr>
<td><strong>Backlight</strong></td>
<td>Yes, with Red on alarm Option</td>
</tr>
<tr>
<td><strong>Programming Method</strong></td>
<td>Front Panel Buttons and USB Programming Software</td>
</tr>
<tr>
<td><strong>Voltage Drop</strong></td>
<td>1.5 V (4.7 V with Backlight)</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-40°C to 75°C (Up to 70°C for Hazardous Areas)</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>0.02%</td>
</tr>
<tr>
<td><strong>Approvals</strong></td>
<td>ATEX IS, UL IS/NI, and IECEx</td>
</tr>
<tr>
<td><strong>Open Collector Output</strong></td>
<td>Two</td>
</tr>
<tr>
<td><strong>Loop-Powered Relays</strong></td>
<td>Two Solid-State</td>
</tr>
<tr>
<td><strong>Isolated 4-20 mA Output</strong></td>
<td>One</td>
</tr>
<tr>
<td><strong>Digital Inputs</strong></td>
<td>One</td>
</tr>
<tr>
<td><strong>Pump Control Features</strong></td>
<td>Standard Features</td>
</tr>
<tr>
<td><strong>Function Keys</strong></td>
<td>Standard Features</td>
</tr>
<tr>
<td><strong>Conformal Coated PCBs</strong></td>
<td>Standard Features</td>
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Loop Leader Models
Loop Leader Models

Loop-Powered Process Meters

✓ PD6602/6
Process Meter
Decimal Display

✓ PD6603/7
Level Meter
Feet & Inches
Display + Bargraph

✓ PD6604/8
Process Meter
Decimal + Bargraph
Loop Leader Models

Loop-Powered Rate/Totalizers

✓ PD6622/26
  Rate/Totalizer
  Decimal Display

✓ PD6624/28
  Rate/Totalizer
  Decimal Display
  + Bargraph
Selling Resources Are Available for Distributors
Selling Resources

We Make Selling the Loop Leader Easy for Our Distributors

- Customized Flyer
- PD6600 Demo Unit
- Loop Leader Selling Guide
Where Can You Get More Information About The Loop Leader?
Call us at 800-343-1001

Visit us at predig.com/loopleader

Download datasheets from predig.com

Email us at sales@predig.com

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Thank you