

Display a 4-20 mA Signal Virtually Anywhere...







with a Precision Digital Loop-Powered Meter

Presenter



Joe Ryan VP of Sales & Marketing

Joe brings more than 15 years of process industry experience in the design, support, manufacturing, marketing, and sales of process measurement and control devices. Joe has extensive field and support experience with process displays and controls, and a strong technical background including a bachelor's degree in Electromechanical Engineering and a master's degree in Computer & Electrical Engineering.



Agenda and Takeaways

Learn the advantages of loop-powered indicators and how easy it is to install them

Satisfy applications in safe and hazardous areas with panel mount or field indicators

Benefit from a common platform: all meters share the same features, functionality, and programming

In 2018...

- Precision Digital Launched the Loop Leader Series of 1/8 DIN Panel Meters
- This Radically Improved and Expanded Features and Functionality Expected From Loop-Powered Indicators





Process Meters





Feet & Inches Level Meters

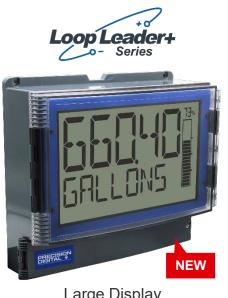




Rate/Totalizers

In 2022...

With the three New Additions of the Loop Leader+, ProtEX+, and VantageView+, Precision Digital Broadened Its Line to Make It the Most Comprehensive Line of Loop-Powered Indicators on the Market!



Large Display **NEMA 4X Enclosure**





Explosion-Proof Aluminum & Stainless Steel

VantageView+



Plastic NEMA 4X Enclosure

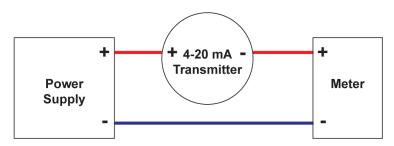
Why Use Loop-Powered Meters?

The most basic decision to make if you want to display a 4-20 mA signal on a digital display is:

Should the meter be powered by line voltage or off the 4-20 mA loop?

The three main benefits of Loop-Powered Meters are:

- No additional power required
- Easy wiring
- Additional digital displays can easily be added in the same loop



The above illustrates how a loop-powered meter is wired. Notice there are only two connections made to the meter.

Precision Digital Why Choose Loop-Powered Meters?

The three most important reasons:



We have been making loop-powered meters for almost 40 years!



We understand what customers want in loop-powered meters



Our products have the features customers want

Common Features of All Product Lines







VantageView+









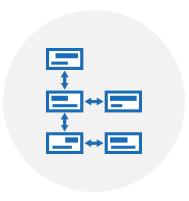


Common Features of All Product Lines

- Same Programming Menu, Software, and Functionality
- Process Meters, F&I Level Meters, and Rate/Totalizers
- Easy-to-Read Informative Dual-Line Display with Alphanumeric Characters and 20-Segment Bargraph
- Red Backlight for Enhanced Alarm Indication
- (2) Open Collector Outputs Standard
- (2) Loop-Powered Solid-State Relays and 4-20 mA Output Options
- Free PC-Based MeterView XL USB Programming Software
- F&I Models Display Level in Feet & Inches
- Rate/Totalizers Display Rate and Total Simultaneously
- Indicators for All Locations including Safe Area and Hazardous Areas with Agency Approved Models

Common Features of All Product Lines

All Meters in This Line Share the Same...



Programming Menu



Features & Functions



PC Software

Three Display Types of Loop-Powered Indicators



Process Meters



Feet & Inches Level Meters



Rate/Totalizers

Note: Displays showing are for the ProtEX+ and VantageView+ meters

Easy-to-Read 14-Segment Alphanumeric Characters and Commas



- Notice how much better letters like "T", "N", and "K" appear as 14-segment characters vs 7-segment characters found on many other meters.
- 14-Segment characters are used on the bottom display of all the loop-powered meters in this product line.



- All totalizers in this product line include commas on the bottom 8-digit display.
- Seems like a simple thing, but adding commas makes an 8-digit number easier to read.

Red Backlight for Enhanced Alarm Indication



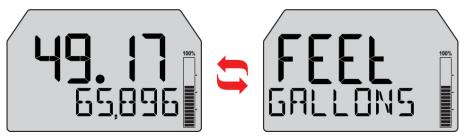
ProtEX+ and VantageView+ Display



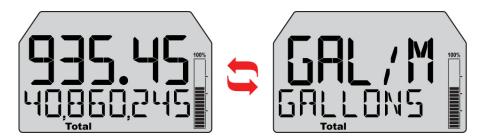
Loop Leader+ Feet & Inches Display

- Can be programmed to turn the display red for alarm conditions
- Can be programmed to flash a message along with the process variable
- Flashing red alarm message can be activated even if no relay or open collector is connected

Dual-Line Display with Dual-Scale Feature



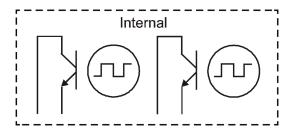
PD6908 Process Meter Showing Input in Feet & Gallons and Toggling Between Process Values and Units.



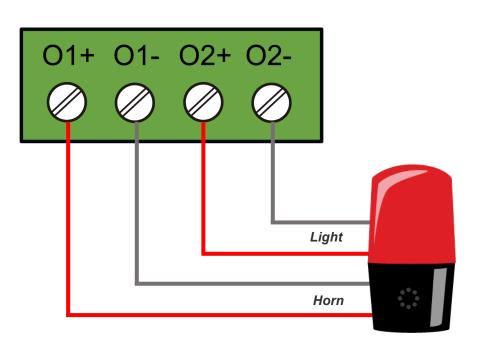
PD6928 Rate/Totalizer Showing Rate and Total at the Same Time and Toggling Between Process Values and Units

- All loop-powered process meters in this product line can display the input in two different scales
- The rate/totalizers can display rate and total at the same time

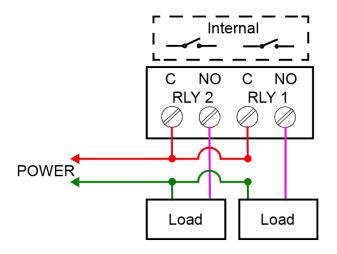
Two NPN Open Collectors Standard



- Can be set up for a variety of pulse or alarm outputs
- Great way to run simple digital signals or small devices like lights and horns
- * Rating: 5-30 VDC @ 150 mA maximum



Two Solid-State Relays Option



Connections for two solid-state relays

- Models available with two solid-state relays
- Relays can be assigned to pump alternation, alarm, timer, stopwatch, on/off, or disable

SPECIFICATIONS

Rating

Loop Leader, Loop Leader+:

250 VAC/VDC @ 1A resistive

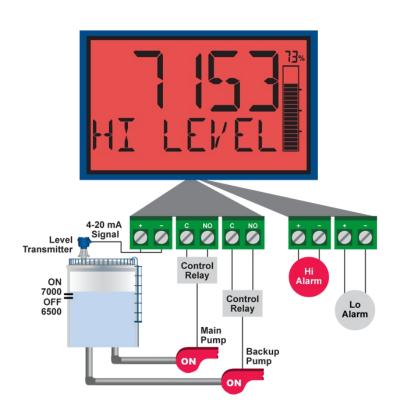
75VA; 250VAC; 0.6A pilot duty (inductive) - UL Code D300 25VA; 250VDC; 0.6A pilot duty (inductive) - UL Code R300

ProtEX+, VantageView+:

250 VAC/VDC @ 0.5A resistive

38 VA; 250 VAC; 0.3 A pilot duty (inductive) 13 VA; 250 VDC; 0.3 A pilot duty (inductive)

Great For Pump Alternation and Alarm Control



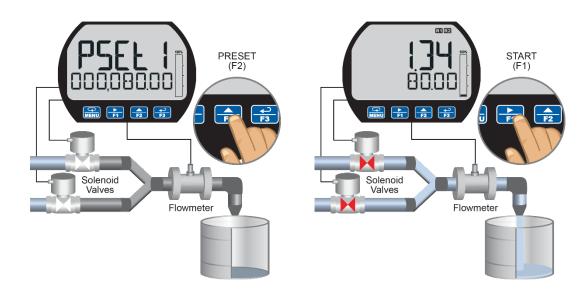
- Two Solid-State Relays optional feature can be used to control two pumps
- Can be programmed to alternate the pumps based on either cycle or time
- Two Open Collectors standard feature can be used to trigger high and low alarms

Note: Loop Leader+ PD4-6604 display is shown in the pump control example.

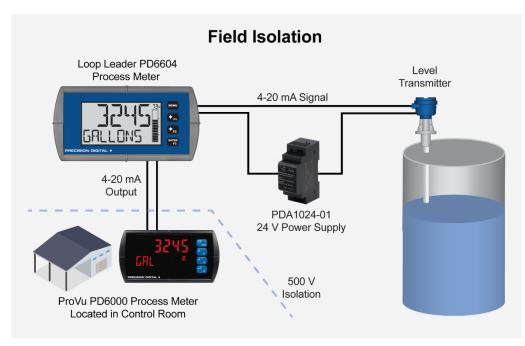
Rate/Totalizer Used for Batch Control



- The flow rate/totalizers can be configured as batch controllers
- On screen presets
- Multi-stage batching

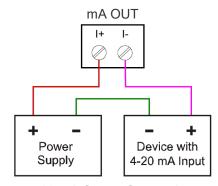


Isolated 4-20 mA Output



PD6604 Loop Leader Used as a Loop-Powered Remote Indicator & Loop Isolator, Showing Volume

- Can be used for Loop Isolation
- Connections are made to terminals labeled mA OUT.
- 4-20 mA Input & Output must be powered from an external power supply



4-20 mA Output Connections

The Easiest Way to Program Your Loop-Powered Meter



Loop Leader+ PD4-6624 rate/totalizer connected to a PC

- Free PC-Based USB Programming Software
- Easy Programming of Feature-Packed Product
- USB Connection Provides Power to the Meter **During Programming**

- Save & Print Configuration Files without the Meter Connected
- Micro USB Cable Provided with the Meter
- PC Data Logging for One or Multiple Variables





Loop Leader+ Key Features

- NEMA 4X, IP65 Rated Enclosure, Wall Mountable
- Large Display Loop-Powered Process Meters, Feet & Inches Level Meters, and Rate/Totalizers
- Huge 2.8" (71 mm) 5-Character Alphanumeric Top Display and 1.5" (39 mm) 8-Character Alphanumeric Bottom Display
- 20-Segment Bargraph with Numeric Percent Indication
- Remote Contacts for Remote Control Station (standard)
- ATEX and IECEx Certified as Intrinsically Safe Models
- Light/Horn & Reset Button Accessory
- Plastic Control Stations Accessories
- Pipe Mounting Kit Available

Loop Leader+ General Purpose Models



Feet & Inches Meters



PD4-6603-LNN **\$1399** PD4-6603-L5N **\$1599**



Process Meters



PD4-6604-LNN **\$1299** PD4-6604-L5N **\$1499**



Rate/Totalizers



PD4-6624-LNN **\$1399** PD4-6624-L5N **\$1599**



Note: All Loop Leader+ models are CE marked.

Loop Leader+ Hazardous Area Approved Models



Feet & Inches Meters



PD4-6607-LNN **\$1599** PD4-6607-L5N **\$1799**



Process Meters



PD4-6608-LNN **\$1499** PD4-6608-L5N **\$1699**



Rate/Totalizers



PD4-6628-LNN **\$1599** PD4-6628-L5N **\$1799**





Note: All Loop Leader+ models are CE marked.





ProtEX+ and VantageView+ Key Features

- CapTouch Through-Window Button Programming
- 20-Segment Vertical Bargraph
- Easy Snap-In Electronics Module
- Display Mountable at 0°, 90°, 180°, & 270°
- Stainless Steel Tag Accessory
- Pipe Mounting Kit Available

ProtEX+

- Housed in Explosion-Proof NEMA 4X, IP68, Die-Cast Aluminum or Stainless Steel Enclosure
- CSA Certified as Explosion-Proof / Dust-Ignition Proof / Flame-Proof
- ATEX and IECEx Certified as Intrinsically Safe

VantageView+

Housed in NEMA 4X, IP66 Plastic Enclosure

VatageView+ General Purpose Models

VantageView+

Feet & Inches Meters



PD6907-GP-PL

Base Price - \$599

VantageView+

Process Meters



PD6908-GP-PL

Base Price - \$539

VantageView+

Rate/Totalizers



PD6928-GP-PL

Base Price - \$559



Note: All VantageView+ models are CE marked.

ProtEX+ Hazardous Area Approved Models



Feet & Inches Meters



PD6907-HA-AL

Base Price \$759



PD6907-HA-SS

Base Price \$1259



Process Meters



PD6908-HA-AL

Base Price \$699



PD6908-HA-SS

Base Price \$1199



Rate/Totalizers



PD6928-HA-AL

Base Price \$719



PD6928-HA-SS

Base Price \$1219

New PD6900 models have reduced pricing from the older PD6800 comparable models.









Note: All ProtEX+ models are CE marked.

Loop-Powered Meters Video



Watch the Video at predig.com/loop-powered



PD4 Loop Leader+ Large Display Intro Meter





- The easiest demo you will ever show
- No electronics or power required
- Key features printed on the front and back

For more details and to order a PD4 Loop Leader+ Intro Meter visit predig.com/demos



Questions?

If you have any questions, then reach out to us.



Joe Ryan VP of Sales & Marketing jryan@predig.com