2014 SHORT FORM CATALOG
Digital Indicators & Controllers

flow
level
temperature
pressure

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We are thankful for our customers’ support and trust over the past 40 years. Customer satisfaction has been and remains our number one priority. We strive to provide practical solutions to a diverse range of industrial applications, and to make these processes operate more intelligently and efficiently. We continue to engineer innovative new products and implement new technologies to help us meet this goal.

Jeffrey L. Peters
President
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What's New

**PD6700**
Vantageview Field-Mount
Process Meter

**PD6701**
Vantageview Field-Mount
Feet & Inches Level Meter

**PD6720**
Vantageview Field-Mount
Analog Input Flow Rate/Totalizer

**PD6770**
Vantageview Field-Mount
Large Display Process Meter

**PD6080**
ProVu® Modbus Scanner with
PDA1485 Adapter

**PD6081**
ProVu® Ft & In Modbus
Scanner with PDA1485 Adapter

**PD8-6081**
ProtEX-MAX Ft & In Modbus
Scanner with Built-in RS-485

**MeterView® EX**
PC Programming Software for
PD6730 and PD6830

**ScanView**
PC Programming Software
for ProVu® Modbus Scanners
PD6730
Vantageview Field-Mount
Pulse Input Flow Rate/Totalizer

PD6730X
Vantageview Field-Mount
Modbus Scanner

PD6730X
Vantageview Field-Mount
Feet & Inches Modbus Scanner

PD6088
ProVu® Modbus Scanner with
Built-in RS-485

PD6089
ProVu® Ft & In Modbus
Scanner with Built-in RS-485

PD8-6080
ProtEX-MAX Modbus Scanner
with Built-in RS-485

PDA1011
Dual Analog Output Expansion
Module for ProVu® Series

PDA8068
USB Serial Adapter for
PD6730 and PD6830

Training Videos
Trident Tutorial Videos
www.predig.com/videos
PD6000 ProVu® Process Meter

Quick Overview
Input: 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)
Display: Dual-line 6-digit, 0.60” (15 mm) & 0.46” (12 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Features
• Dual-scale for level applications - single input
• Signal input conditioning for flow & round horizontal tanks
• 32-point, square root, or exponential linearization
• Multi-pump alternation control
• On-board digital input
• Programmable function keys
• Isolated 24 VDC @ 200 mA transmitter power supply
• Modbus® RTU communication protocol

Free Software Available
MeterView Pro: Configure, monitor, and datalog from a PC. Requires serial communication adapter.

Options
• 4-20 mA output with isolated 24 VDC @ 40 mA power supply
• 2 or 4 form C internal relays
• External 4-relay and digital I/O expansion modules
• RS-232, RS-485 serial communications
• SunBright display models

PD6060 ProVu® Dual-Input Process Meter

Quick Overview
Input: Dual 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)
Display: Dual-line 6-digit, 0.60” (15 mm) & 0.46” (12 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Features
• Addition, difference, absolute difference, average, multiplication, division, min of A or B, max of A or B, draw, weighted average, and ratio math functions
• Signal input conditioning for flow & round horizontal tanks
• On-board digital input
• Programmable function keys
• Isolated 24 VDC @ 200 mA transmitter power supply
• Modbus® RTU communication protocol

Free Software Available
MeterView Pro: Configure, monitor, and datalog from a PC. Requires serial communication adapter.

Options
• 4-20 mA output with isolated 24 VDC @ 40 mA power supply
• 2 or 4 form C internal relays
• External 4-relay, digital I/O, & dual 4-20 mA out modules
• RS-232, RS-485 serial communications
• SunBright display models
Quick Overview

**Input:** Modbus® RTU; Dual 0-20 mA, 4-20 mA, ±10 VDC (0-5, 1-5, 0-10 V)
**Display:** Dual-line 6-digit, 0.60” (15 mm) & 0.46” (12 mm)
**Case:** 1/8 DIN, NEMA 4X/IP65
**Power:** 85-265 VAC or 12/24 VDC option
**Operating Temperature:** -40 to 65°C

**Features**
- Master, slave, or snooper mode
- Scan up to 16 PVs
- Includes PDA1485 RS-485 communications module
- 4-20 mA analog output option (up to three)
- On-board digital input
- Programmable function keys
- Isolated 24 VDC @ 200 mA transmitter power supply
- Modbus® RTU communication protocol

**Free Software Available**

**ScanView:** Configure, monitor, and datalog from a PC. Requires serial communication adapter.

**Options**
- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
- External 4-relay, digital I/O, & dual 4-20 mA out modules
- RS-232 serial communications
- SunBright display models
**PD6088** ProVu® Super Snooper Modbus Scanner

**Quick Overview**
- **Input**: Modbus® RTU;
- **Display**: Dual-line 6-digit, 0.60” (15 mm) & 0.46” (12 mm)
- **Case**: 1/8 DIN, NEMA 4X/IP65
- **Power**: 85-265 VAC or 12/24 VDC option
- **Operating Temperature**: -40 to 65°C

**Features**
- Master, slave, or snooper mode
- Scan up to 16 PVs
- 4-20 mA analog output option (up to three)
- On-board digital input
- Programmable function keys
- Isolated 24 VDC @ 200 mA transmitter power supply
- On-board RS-485 Modbus® RTU communications

**Free Software Available**
- **ScanView**: Configure, monitor, and datalog from a PC.
  - Requires serial communication adapter.

**Options**
- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
- External 4-relay, digital I/O, & dual 4-20 mA out modules
- RS-232, RS-485 serial communications
- SunBright display models

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**PD6089** ProVu® Feet & Inches Super Snooper Modbus Scanner

**Quick Overview**
- **Input**: Modbus® RTU;
- **Display**: Dual-line 6-digit, 0.60” (15 mm) feet & inches upper display, & 0.46” (12 mm) lower display
- **Case**: 1/8 DIN, NEMA 4X/IP65
- **Power**: 85-265 VAC or 12/24 VDC option
- **Operating Temperature**: -40 to 65°C

**Features**
- Master, slave, or snooper mode
- Scan multiple PVs
- 4-20 mA analog output option (up to three)
- On-board digital input
- Programmable function keys
- Isolated 24 VDC @ 200 mA transmitter power supply
- On-board RS-485 Modbus® RTU communications

**Free Software Available**
- **ScanView**: Configure, monitor, and datalog from a PC.
  - Requires serial communication adapter.
**Quick Overview**

**Input:** 0-10, 0-20, ±10, ±20, ±100, ±200 mV; Modbus PV (slave)
**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
**Case:** 1/8 DIN, NEMA 4X/IP65
**Power:** 85-265 VAC or 12/24 VDC option
**Operating Temperature:** -40 to 65°C

**Features**
- Selectable 5, 10, or 24 VDC excitation power supply
- Capture or programmable tare feature
- Ratiometric operation
- Dual-scale feature - single input
- Rounding function 1, 2, 5, 10, 20, 50, or 100
- Auto-zero feature eliminates zero drift
- Isolated 24 VDC @ 200 mA transmitter power supply
- On-board digital input
- Modbus® RTU communication protocol

**Options**
- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
- External 4-relay and digital I/O expansion modules
- RS-232, RS-485 serial communications
- SunBright display models

**Free Software Available**

**MeterView Pro:** Configure, monitor, and datalog from a PC. Requires serial communication adapter.

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**Quick Overview**

**Input:** 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)
**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
**Case:** 1/8 DIN, NEMA 4X/IP65
**Power:** 85-265 VAC or 12/24 VDC option
**Operating Temperature:** -40 to 65°C

**Features**
- Displays rate and total simultaneously
- Count up or down, total & grand total
- Open channel flow with programmable exponent
- Square root extraction
- 32-point linearization with free software
- Total, grand total, or non-resettable grand total
- Isolated 24 VDC @ 200 mA transmitter power supply
- On-board digital input
- Modbus® RTU communication protocol

**Options**
- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
- External 4-relay and digital I/O expansion modules
- RS-232, RS-485 serial communications
- SunBright display models

**Free Software Available**

**MeterView Pro:** Configure, monitor, and datalog from a PC. Requires serial communication adapter.
**PD6210** ProVu® Analog Input Batch Controller

**Quick Overview**
- **Input:** 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)
- **Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 85-265 VAC or 12/24 VDC option
- **Operating Temperature:** -40 to 65°C

**Features**
- Start, batch, pause, & stop with front panel buttons
- Display batch total + rate, grand total, batch count or preset
- Single or multi-stage batching with up to 8 relays
- Automatic overflow correction
- Manual control or automatic batching
- Count up or down, total & grand total
- On-board digital input
- Modbus® RTU communication protocol

**Free Software Available**
- MeterView Pro: Configure, monitor, and datalog from a PC. Requires serial communication adapter.

**Options**
- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
- External 4-relay and digital I/O expansion modules
- RS-232, RS-485 serial communications
- SunBright display models

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**PD6262** ProVu® Analog Dual-Input Rate/Totalizer

**Quick Overview**
- **Input:** Dual 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)
- **Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 85-265 VAC or 12/24 VDC option
- **Operating Temperature:** -40 to 65°C

**Features**
- Display rate, total, or grand total for either channel, or math
- Math functions based on rate, total, or grand total
- Addition, difference, absolute difference, average, multiplication, division, min of A or B, max of A or B, draw, weighted average, ratio, and concentration math functions
- Count up or down, total & grand total
- 5, 10 or 24 VDC isolated flawmeter power supply
- On-board digital input
- Modbus® RTU communication protocol

**Free Software Available**
- MeterView Pro: Configure, monitor, and datalog from a PC. Requires serial communication adapter.

**Options**
- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
- External 4-relay, digital I/O, & dual 4-20 mA out modules
- RS-232, RS-485 serial communications
- SunBright display models
PD6300  ProVu® Pulse Input Flow Rate/Totalizer

Quick Overview
Input: Pulse, open collector, NPN, PNP, TTL, switch contact, sine wave (coil), square wave; Modbus PV (slave)
Display: Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Features
• Displays rate and total simultaneously
• Count up or down, total & grand total
• 5, 10, or 24 VDC flowmeter power supply
• Gate function for rate display of slow pulse rates
• K-Factor, internal scaling, or external calibration
• Can convert pulse input to an isolated 4-20 mA output
• Isolated 24 VDC @ 200 mA transmitter power supply
• On-board digital input

Free Software Available
MeterView Pro: Configure, monitor, and datalog from a PC. Requires serial communication adapter.

Options
• 4-20 mA output with isolated 24 VDC @ 40 mA power supply
• 2 or 4 form C internal relays
• External 4-relay and digital I/O expansion modules
• RS-232, RS-485 serial communications
• SunBright display models

PD6310  ProVu® Pulse Input Batch Controller

Quick Overview
Input: Pulse, open collector, NPN, PNP, TTL, switch contact, sine wave (coil), square wave, Modbus PV (slave)
Display: Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Features
• Start, batch, pause, & stop with front panel buttons
• Display batch total + rate, grand total, batch count or preset
• Single or multi-stage batching with up to 8 relays
• Automatic overflow correction
• Manual control or automatic batching
• Count up or down, total & grand total
• On-board digital input
• Modbus® RTU communication protocol

Free Software Available
MeterView Pro: Configure, monitor, and datalog from a PC. Requires serial communication adapter.

Options
• 4-20 mA output with isolated 24 VDC @ 40 mA power supply
• 2 or 4 form C internal relays
• External 4-relay and digital I/O expansion modules
• RS-232, RS-485 serial communications
• SunBright display models
****PD6363 ProVu® Pulse Dual-Input Rate/Totalizer****

**Quick Overview**

**Input:** Dual Pulse, open collector, NPN, PNP, TTL, switch contact, sine wave (coil), square wave; Modbus PV (slave)

**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)

**Case:** 1/8 DIN, NEMA 4X/IP65

**Power:** 85-265 VAC or 12/24 VDC option

**Operating Temperature:** -40 to 65°C

**Features**

- Quadrature inputs
- Display rate, total, or grand total for either channel, or math
- Math functions based on rate, total, or grand total
- Addition, difference, absolute difference, average, multiplication, division, min of A or B, max of A or B, draw, weighted average, ratio, and concentration math functions
- Count up or down, total & grand total
- Count up or down based on digital input
- Count up or down based on second input
- 5, 10 or 24 VDC isolated flowmeter power supply
- Convert pulse input or math result to a 4-20 mA output

**Free Software Available**

**MeterView Pro:** Configure, monitor, and datalog from a PC. Requires serial communication adapter.

****PD7000 ProVu® Temperature Meter****

**Quick Overview**

**Input:** Thermocouple J, K, T, E, R, S, B, N, C; RTD 100 Ω Pt, 10 Ω Cu, 120 Ω Ni, 1,000 Ω Pt; Modbus PV (slave)

**Display:** Dual-line 6-digit: 0.60" (15 mm) & 0.46" (12 mm)

**Case:** 1/8 DIN, NEMA 4X/IP65

**Power:** 85-265 VAC or 12/24 VDC option

**Operating Temperature:** -20 to 65°C

**Features**

- 1° or 0.1° resolution
- Averages up to 10 RTD sensors
- Automatic cold junction compensation
- Interlock relays (force on)
- On-board digital input
- Programmable function keys
- Modbus® RTU communication protocol

**Free Software Available**

**MeterView Pro:** Configure, monitor, and datalog from a PC. Requires serial communication adapter.

**Options**

- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
- External 4-relay and digital I/O expansion modules
- RS-232, RS-485 serial communications
- SunBright display models

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**DIGITAL PANEL METERS**

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See the full catalog at www.predig.com or call 1-800-343-1001.
Quick Overview

Input: Process: 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V)
Temperature: Thermocouple J, K, T, E; RTD 100 Ω Pt
Display: 4-digit, 1.20" (30.5 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: 85-265 VAC or 12-36 VDC option
Operating Temperature: 0 to 65°C

Features

• 1° or 0.1° resolution with RTD
• Sunlight readable display
• Maximum/minimum display
• Linear or square root with low-flow cutoff
• Transmitter power option
• Modbus® RTU or proprietary ASCII protocol
• Shallow depth case 3.6" behind panel

Free Software Available

MeterView: Program, monitor, and datalog up to 100 meters from PC. Requires serial communication adapter.

Options

• 2 relays and 4-20 mA analog output options
• 24 VDC transmitter power supply
• Dual 24 VDC transmitter power supplies
• Serial communications
PD603  Sabre P Process Meter

**Quick Overview**
- **Input:** 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V)
- **Display:** 4-digit, 0.56" (14.2 mm)
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 85-265 VAC or 12-36 VDC
- **Operating Temperature:** 0 to 65°C

**Features**
- Maximum/minimum display
- Scale without a signal source
- Calibrate with a signal source
- Easy front panel programming
- Shallow depth enclosure 3.6" behind panel

**Options**
- 24 VDC transmitter power supply

PD644  Javelin D High-Voltage DC Meter

**Quick Overview**
- **Input:** 0-300 VDC
- **Display:** 4-digit, 0.56" (14.2 mm)
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 85-265 VAC or 12-36 VDC
- **Operating Temperature:** 0 to 65°C

**Features**
- Maximum/minimum display
- RS-485 serial communications
- 4-20 mA output
- Modbus® RTU
- Shallow depth enclosure 3.6" behind panel

**Options**
- 2 form C relays
- 24 VDC transmitter supply

PD743  Sabre T Temperature Meter

**Quick Overview**
- **Input:** Thermocouple J, K, T, E; RTD 100 Ω platinum
- **Display:** 4-digit, 0.56" (14.2 mm)
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 85-265 VAC or 12-36 VDC
- **Operating Temperature:** 0 to 65°C

**Features**
- 1° or 0.1° resolution with RTD
- Maximum/minimum display
- Pre-calibrated for all input types
- Easy front panel programming
- Shallow depth enclosure 3.2" behind panel

PD865  Snooper Modbus® Serial Input Meter

**Quick Overview**
- **Input:** RS-485 Modbus RTU
- **Display:** 6-digit, 0.56" (14.2 mm)
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 85-265 VAC or 12-36 VDC
- **Operating Temperature:** -40 to 65°C

**Options**
- 2 form C relays
- Isolated 4-20 mA transmitter output

**Features**
- Master, slave, or snooper mode
- 2 form A relays
- Linear, square root, or programmable exponent
- RS-485 serial communications
- Proxy polling for up to 8 process variables
- Shallow depth enclosure 3.4" behind panel
**PD138** Minimux® II Temperature & Process Scanner

**Quick Overview**
- **Input:** TC, RTD, Process, AC, DC
- **Display:** Eight LED indicators
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 115 VAC, 230 VAC, 12-24 VDC
- **Operating Temperature:** -40 to 65°C

**Features**
- 8 inputs per unit
- Unlimited number of units per system
- Adjustable dwell time for each channel
- Independent alarm input for each channel
- First-out alarm indication
- Built-in 85 dB horn

**Options**
- Current loop resistor

**PD154** Vigilante® II 4-Point Alarm Annunciator

**Quick Overview**
- **Input:** Switch, transistor, logic level
- **Display:** Four red LED indicators
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 85-265 VAC or 12-36 VDC
- **Operating Temperature:** -40 to 65°C

**Features**
- 8 field selectable sequences
- 4-point monitoring
- All common ISA sequences including first-out
- Built-in 85 dB horn
- 2 SPDT relays for alarm activated devices
- Silence, acknowledge, and reset functions
- Multiple-unit first-out indication

**Accessories**
- PDA1500 High VAC/VDC to Logic Level Converter

**PD158** Vigilante® II 8-Point Alarm Annunciator

**Quick Overview**
- **Input:** Switch, transistor, logic level
- **Display:** Eight red LED indicators
- **Case:** 1/8 DIN, NEMA 4X/IP65
- **Power:** 85-265 VAC or 12-36 VDC
- **Operating Temperature:** -40 to 65°C

**Features**
- 8 field selectable sequences
- 8-point monitoring
- All common ISA sequences including first-out
- Built-in 85 dB horn
- 2 SPDT relays for alarm activated devices
- Silence, acknowledge, and reset functions
- Multiple-unit first-out indication

**Accessories**
- PDA1500 High VAC/VDC to Logic Level Converter

**PDS178** Temperature Scanning System

**Quick Overview**
- **Input:** J, K, E, T thermocouples, 100 Ω platinum RTD
- **Display:** 4-digit + 8 LED indicators
- **Case:** NEMA 4X plastic
- **Power:** 115 VAC
- **Operating Temperature:** 0 to 65°C

**Options**
- PDS178: 0.56" (14.2 mm) display
- PDS178X2: 1.2" (30.5 mm) display

**Features**
- 8-channel temperature scanner
- Temperature indicator with 2 relays
- NEMA 4X plastic enclosure
- 8 inputs per unit
- Built-in 85 dB horn
- First-out indication
- Sunlight readable indication
Quick Overview

System Requirements: Windows® 2000, XP, Vista, 7 (Windows® 32-bit and 64-bit operating systems)
Communications: One meter at a time: USB, RS-232, or RS-485
Meter Address: 1 - 247
Reports: Data logging: Save as CSV file format
Configuration: Save as PDC file format or print configuration
Baud Rate: 300 - 19,200 bps
Protocol: Modbus RTU (requires ProVu® firmware version 2.0 or higher)

Features

Communicate from a PC to
• Configure the meter
• Monitor present trends
• Log to as large of a file as needed

Required Adapter

PDA8008 ProVu® USB serial adapter (recommended)
or PDA1232 ProVu® RS-232 serial adapter
ScanView Software For ProVu® Super Snooper Modbus Scanners

Quick Overview
System Requirements: Windows® 2000, XP, Vista, 7, 8
Communications: RS-232, or RS-485 Adapter
Meter Address: 1 - 247
PV Slave ID: 1-247, 256-259 for on-board current & voltage inputs
Reports: Data logging: Save as CSV file format
Configuration: Save as MVP file format or print configuration
Baud Rate: 300 - 19,200 bps
Configuration: One meter at a time
Protocol: Modbus RTU

Features
- Use in Modbus master, slave, or snooper mode
- Scan up to 16 Modbus process variables
- Easily configure Super Snooper Modbus Scanners
- Manage scanner settings
- Monitor critical process information
- Program and display the four math channels
- Manage relays and analog outputs
- Independent scaling, tag, and unit for each PV
- Modbus RTU serial communications via RS-485
- Data log all PVs to a PC

Required Adapter
PDA8008 ProVu® USB serial adapter (PD6088 & PD6089)
PDA8485 USB to RS-422/485 converter (PD6080 & PD6081)

MeterView® Software For Trident Series

Quick Overview
System Requirements: Windows® XP (SP3), Vista, 7, 8 (Note: Windows® 32-bit and 64-bit operating systems only)
Communications: USB, RS-232, or RS-485 Adapter
Meter Address: 00 - 99
Reports: Data logging: Save as HTML file format
Configuration: Save as plain text, export to HTML, or print configuration
Baud Rate: 300 - 19,200 bps
Configuration: One meter at a time

Features
- Monitor up to 100 meters
- Program or read meter settings
- Save meter profiles for cloning
- Use profiles for reporting

Required Adapter
PDA8006 Trident USB serial adapter (recommended)
or PDA7232 Trident RS-232 serial adapter
Quick Overview

System Requirements: Windows® XP, Vista, 7, 8
Communications: RS-485 adapter or direct USB adapter from PD6830.
Meter Address: 1 - 247
Baud Rate: 1,200 - 115,200 bps, selection must match the baud rate selected in the meter
Configuration: Configure meter settings one meter at a time.
Data Logging Report: Save as CSV file format
Configuration Report: Save as MVE file or print configuration
Protocol: Modbus RTU

Features
Communicate from a PC to
- Configure the meter
- Monitor present trends
- Log to as large of a file as needed

Required Adapter
PDA8068 USB serial adapter

Configuring & Monitoring Software for PD6830 & PD6730

Monitoring

Input Setup

Display Setup

Data Logging

System Setup
PROVu® Accessories

**Expansion Modules**
PDA1004: 4-relay module
PDA1011*: Dual 4-20 mA output module
PDA1044: 4 digital I/O module

**Serial Adapters**
PDA1232: RS-232 serial adapter
PDA1485: RS-485 serial adapter
PDA8008: USB serial adapter

* PDA1011 for use with PD6060, PD6080, PD6081, PD6088, PD6089, PD6262, and PD6363 only.

**Additional Accessories**
PDA1002: DIN-rail mounting kit
PDA1200: Meter copy cable

Trident Accessories

**Serial Adapters**
PDA7232: RS-232 serial adapter
PDA7422: RS-485 serial adapter
PDA8006: USB serial adapter

**Additional Accessories**
PDA7420: Meter copy cable

Serial Converters

**RS-232 to RS-422/485**
PDA7485-I: converter, isolated
PDA7485-N: converter, non-isolated

**USB to RS-422/485**
PDA8485-I: converter, isolated
PDA8485-N: converter, non-isolated

**USB to RS-232**
PDA8232-N: converter, non-isolated

MeterView EX Adapter

**Serial Adapter**
PDA8068: USB serial adapter for PD6730 & PD6830
**Meter Types**

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* Vertical panel cutouts available for Type D meters. To order add -V at the end of part number (e.g. PDA2501-V).
PD662 Survivor NEMA 4X Process Meter

Quick Overview
Input: 4-20 mA
Display: 3½+ digits, 0.6” (15.24 mm)
Case: NEMA 4X high impact plastic
Power: Loop-powered
Operating Temperature: -40 to 75°C
(-55 to 75°C with heater option)

Features
- 1.7 V drop (3.7 V with backlight)
- Maximum/minimum display
- Easy four-button programming
- ½” NPT conduit hole
- HART protocol transparent
- Multipoint linearization and square root function

Options
- Heater
- Loop-powered backlight

PD683 Loop Leader® Process Meter

Quick Overview
Input: 4-20 mA
Display: 5-digit, 0.6” (15.2 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: Loop-powered
Operating Temperature: -30 to 65°C

Features
- 2.0 V drop (5.7 V drop with backlight)
- Loop-powered backlight standard
- Custom engineering units
- Maximum/minimum display
- Linear, square root or programmable exponent
- Bargraph display and trend arrow
- Shallow depth enclosure 3.2” behind panel
PD684 Loop Leader® Rate/Totalizer

Quick Overview
Input: 4-20 mA
Display: 5-digit, 0.6” (15.2 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: Loop-powered
Operating Temperature: -20 to 65°C

Features
• 2.0 V drop (5.7 V drop with backlight)
• Loop-powered backlight standard
• Custom engineering units
• Maximum/minimum display
• Linear, square root or programmable exponent
• Bargraph display and trend arrow
• Programmable alternating rate/total display
• Open collector alarm or pulse output
• Shallow depth enclosure 3.2” behind panel

PD685 NEMA 4X Process Meter

Quick Overview
Input: 4-20 mA
Display: 3½ digits, 1.0” (25.4 mm)
Case: NEMA 4X high impact plastic
Power: Loop-powered
Operating Temperature: -40 to 85°C

Options
• ½” conduit hole (rear, top, or none)

Features
• 1.0 V drop
• ½” NPT conduit hole (bottom)
• NEMA 4X IP67 high impact plastic enclosure

PD686 NEMA 4X Process Meter

Quick Overview
Input: 4-20 mA
Display: 3½ digits, 1.0” (25.4 mm)
Case: NEMA 4X high impact plastic
Power: Loop-powered
Operating Temperature: -40 to 85°C

Options
• ½” conduit hole (rear, top, or none)

Features
• 1.0 V drop
• ½” NPT conduit hole (bottom)
• NEMA 4X IP67 high impact plastic enclosure
PD688 Loop Leader® Process Meter

Quick Overview
Input: 4-20 mA
Display: 5-digit, 0.6" (15.2 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: Loop-powered
Operating Temperature: -30 to 65°C

Features
• 2.0 V drop (5.7 V drop with backlight)
• Loop-powered backlight standard
• Custom engineering units
• Maximum/minimum display
• Linear, square root or programmable exponent
• Bargraph display and trend arrow
• Shallow depth enclosure 3.2" behind panel

PD689 Loop Leader® Rate/Totalizer

Quick Overview
Input: 4-20 mA
Display: 5-digit, 0.6" (15.2 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: Loop-powered
Operating Temperature: -20 to 65°C

Features
• 2.0 V drop (5.7 V drop with backlight)
• Loop-powered backlight standard
• Custom engineering units
• Maximum/minimum display
• Linear, square root or programmable exponent
• Bargraph display and trend arrow
• Programmable alternating rate/total display
• Open collector alarm or pulse output
• Shallow depth enclosure 3.2" behind panel
Quick Overview

Input: 4-20 mA
Display: 5-digit upper display 0.7" (17.8 mm); 7 alphanumeric character lower display 0.4" (10.2 mm)
Case: Plastic NEMA 4X field mount
Power: Loop-powered
Operating Temperature: -40 to 75°C

Features
- SafeTouch® through-window button programming
- Alphanumeric tag names
- 3.0 V drop (6.0 V drop with backlight)
- Flanges for wall or pipe mounting
- Backlight standard
- Loop-powered
- Password protection
- 32-point, square root, or exponential linearization
PD6701 Vantageview Feet & Inches Level Meter

Quick Overview
Input: 4-20 mA
Display: 0.6” (15.24 mm) feet & inches upper display; 7 alphanumeric character lower display 0.4” (10.2 mm)
Case: Plastic NEMA 4X field mount
Power: Loop-powered
Operating Temperature: -40 to 75°C

Features
• SafeTouch® through-window button programming
• Alphanumeric tag names
• 3.0 V drop (6.0 V drop with backlight)
• Flanges for wall or pipe mounting
• Backlight standard
• Loop-powered
• Password protection
• 32-point linearization
• Level and volume
• Level and percent
• Open collector Hi or Lo alarm
• Tank level bargraph

PD6720 Vantageview Analog Input Flow Rate/Totalizer

Quick Overview
Input: 4-20 mA
Display: 5-digit rate 0.7” (17.8 mm); 7 alphanumeric character total 0.4” (10.2 mm)
Case: Plastic NEMA 4X field mount
Power: Loop-powered
Operating Temperature: -40 to 75°C

Features
• SafeTouch® through-window button programming
• 7-digit totalizer
• 3.0 V drop (6.0 V drop with backlight)
• Flanges for wall or pipe mounting
• Backlight standard
• Loop-powered
• Password protection
• 32-point, square root, or exponential linearization
• Open collector pulse or alarm output
PD6730  Vantageview Pulse Input Flow Rate/Totalizer

Quick Overview
Input: Pulse, open collector, NPN, PNP, TTL, switch contact, sine wave (coil), square wave, opto-isolated
Display: 5-digit rate 0.7” (17.8 mm); 7 alphanumeric character total 0.4” (10.2 mm)
Case: Plastic NEMA 4X field mount
Power: 9-30 VDC, output-loop, or battery
Operating Temperature: -40 to 75°C (-20 to 75°C battery)

Features
• SafeTouch® through-window button programming
• Up to 13-digit total with overflow display
• Mounts directly to flowmeter
• Automatic rate, total, & grand total unit conversions
• On-board data logging (1024 points)
• Two isolated open collector pulse outputs, up to 5 kHz
• Backlight standard on all models

Options
• Isolated 4-20 mA output for rate, total, or grand total
• Isolated or non-isolated RS-485 with Modbus® communications

PD6730X  Vantageview Super Snooper Modbus Scanner

Quick Overview
Input: Modbus® RTU, pulse
Display: 5-digit 0.7” (17.8 mm) upper display; 7 alphanumeric character 0.4” (10.2 mm) lower display
Case: Plastic NEMA 4X field mount
Power: 9-30 VDC
Operating Temperature: -40 to 75°C

Features
• Master, slave, or snooper mode
• Scan multiple process variables (PV)
• SafeTouch® through-window button programming
• Alphanumeric tag names
• Flanges for wall or pipe mounting
• Backlight standard
• Password protection
• 32-point linearization channel
• Two open collector pulse or alarm outputs
**Quick Overview**

**Input:** Modbus® RTU

**Display:** 0.6” (15.24 mm) feet & inches upper display; 7 alphanumeric character lower display 0.4" (10.2 mm)

**Case:** Plastic NEMA 4X field mount

**Power:** 9-30 VDC

**Operating Temperature:** -40 to 75°C

**Features**

- Master, slave, or snooper mode
- Scan multiple tanks
- SafeTouch® through-window button programming
- Alphanumeric tag names
- Flanges for wall or pipe mounting
- Backlight standard
- Password protection
- 32-point linearization
- Two open collector alarm outputs
- Tank level bargraph

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**Quick Overview**

**Input:** 4-20 mA

**Display:** 3½ digits, 1.0” (25.4 mm)

**Case:** Plastic NEMA 4X field mount

**Power:** Loop-powered

**Operating Temperature:** -40 to 75°C

**Options**

- Loop-powered backlight

**Features**

- 1.0 V drop (4.0 V drop with backlight)
- Flanges for wall or pipe mounting
- Easy calibration and installation
PD663  ProtEX-Lite Process Meter

Quick Overview
Input: 4-20 mA
Display: 3½+ digits, 0.6" (15.24 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: Loop-powered
Operating Temperature: -40 to 75°C

Options
• Loop-powered backlight
• Reed switches

Features
• 1.7 V drop (4.7 V drop with backlight)
• Flanges for wall or pipe mounting
• Maximum/minimum display
• Programmable noise filter
• Multipoint linearization and square root function

PD6800  ProtEX-Pro Process Meter

Quick Overview
Input: 4-20 mA
Display: 5-digit upper display 0.7" (17.8 mm); 7 alphanumeric character lower display 0.4" (10.2 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: Loop-powered
Operating Temperature: -40 to 75°C

Features
• SafeTouch® through-glass button programming
• Alphanumeric tag names
• 3.0 V drop (6.0 V drop with backlight)
• Flanges for wall or pipe mounting
• Backlight standard
• Loop-powered
• Password protection
• 32-point, square root, or exponential linearization

EXPLOSION-PROOF INSTRUMENTS

2014 short form catalog
PD6801 ProtEX-F&I Feet & Inches Level Meter

Quick Overview
Input: 4-20 mA
Display: 0.6” (15.24 mm) feet & inches upper display; 7 alphanumeric character lower display 0.4” (10.2 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: Loop-powered
Operating Temperature: -40 to 75°C

Features
• SafeTouch® through-glass button programming
• Alphanumeric tag names
• 3.0 V drop (6.0 V drop with backlight)
• Flanges for wall or pipe mounting
• Backlight standard
• Loop-powered
• Password protection
• 32-point linearization
• Level and volume
• Level and percent
• Open collector Hi or Lo alarm
• Tank level bargraph

PD6820 ProtEX-RTA Analog Input Flow Rate/Totalizer

Quick Overview
Input: 4-20 mA
Display: 5-digit rate 0.7” (17.8 mm); 7 alphanumeric character total 0.4” (10.2 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: Loop-powered
Operating Temperature: -40 to 75°C

Features
• SafeTouch® through-glass button programming
• 7-digit totalizer
• 3.0 V drop (6.0 V drop with backlight)
• Flanges for wall or pipe mounting
• Backlight standard
• Loop-powered
• Password protection
• 32-point, square root, or exponential linearization
• Open collector pulse or alarm output
PD6830 ProtEX-RTP Pulse Input Flow Rate/Totalizer

Quick Overview
Input: Pulse, open collector, NPN, PNP, TTL, switch contact, sine wave (coil), square wave, opto-isolated
Display: 5-digit rate 0.7” (17.8 mm); 7 alphanumeric character total 0.4” (10.2 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: 9-30 VDC, output-loop, or battery
Operating Temperature: -40 to 75°C (-20 to 75°C battery)

Features
• SafeTouch® through-glass button programming
• Up to 13-digit total with overflow display
• Mounts directly to flowmeter
• Automatic rate, total, & grand total unit conversions
• On-board data logging (1024 points)
• Two isolated open collector pulse outputs, up to 5 kHz
• Backlight standard on all models

Options
• Isolated 4-20 mA output for rate, total, or grand total
• Isolated or non-isolated RS-485 with Modbus® communications

PD6870 ProtEX-FarVu Large Display Meter

Quick Overview
Input: 4-20 mA
Display: 3½ digits, 1.0” (25.4 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: Loop-powered
Operating Temperature: -40 to 75°C

Options
• Loop-powered backlight

Features
• 1.0 V drop (4.0 V drop with backlight)
• Flanges for wall or pipe mounting
• Easy calibration and installation
**Quick Overview**

**Input:** Modbus® RTU

**Display:** 0.6" (15.24 mm) feet & inches upper display; 
7 alphanumeric character lower display 0.4" (10.2 mm)

**Case:** Smooth die-cast aluminum explosion-proof

**Power:** 9-30 VDC

**Operating Temperature:** -40 to 75°C

**Features**

- Master, slave, or snooper mode
- Scan multiple tanks
- SafeTouch® through-glass button programming
- Alphanumeric tag names
- Flanges for wall or pipe mounting
- Backlight standard
- Password protection
- 32-point linearization
- Two open collector alarm outputs
- Tank level bargraph

**Explosion-proof. Complete product approved.**

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**Quick Overview**

**Input:** Modbus® RTU, pulse

**Display:** 5-digit 0.7" (17.8 mm) upper display; 
7 alphanumeric character 0.4" (10.2 mm) lower display

**Case:** Smooth die-cast aluminum explosion-proof

**Power:** 9-30 VDC

**Operating Temperature:** -40 to 75°C

**Features**

- Master, slave, or snooper mode
- Scan multiple process variables (PV)
- SafeTouch® through-glass button programming
- Alphanumeric tag names
- Flanges for wall or pipe mounting
- Backlight standard
- Password protection
- 32-point linearization channel
- Two open collector pulse or alarm outputs

**Explosion-proof. Complete product approved.**
### PD8-154 ProtEX-MAX 4-Point Annunciator

**Quick Overview**

**Input:** Switch, transistor, logic level  
**Display:** 4 red LED indicators  
**Case:** Smooth die-cast aluminum explosion-proof  
**Power:** 85-265 VAC or 12-36 VDC  
**Operating Temperature:** -40 to 65°C

**Features**
- 8 field selectable sequences  
- 4-point monitoring  
- All common ISA sequences  
- Multiple-unit first-out indication  
- 2 SPDT relays for alarm activated devices  
- Silence, acknowledge, and reset functions  
- SafeTouch™ through-glass button programming  
- Flanges for wall or pipe mounting

![ProtEX-MAX 4-Point Annunciator Image](image)

### PD8-158 ProtEX-MAX 8-Point Annunciator

**Quick Overview**

**Input:** Switch, transistor, logic level  
**Display:** 4 or 8 red LED indicators  
**Case:** Smooth die-cast aluminum explosion-proof  
**Power:** 85-265 VAC or 12-36 VDC  
**Operating Temperature:** -40 to 65°C

**Features**
- 8 field selectable sequences  
- 8-point monitoring  
- All common ISA sequences  
- Multiple-unit first-out indication  
- 2 SPDT relays for alarm activated devices  
- Silence, acknowledge, and reset functions  
- SafeTouch™ through-glass button programming  
- Flanges for wall or pipe mounting

![ProtEX-MAX 8-Point Annunciator Image](image)
**PD8-6000**  ProtEX-MAX Process Meter

**Quick Overview**

**Input:** 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)

**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)

**Case:** Smooth die-cast aluminum explosion-proof

**Power:** 85-265 VAC or 12/24 VDC option

**Operating Temperature:** -40 to 65°C

**Features**

- Dual-scale for level applications - single input
- 32-point, square root, or exponential linearization
- Multi-pump alternation control
- Programmable function keys
- Isolated 24 VDC @ 200 mA transmitter power supply
- SafeTouch® through-glass button programming
- 4 on-board digital inputs and outputs
- Modbus® RTU communication protocol
- SunBright display

**Options**

- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays

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**PD8-6060**  ProtEX-MAX Dual-Input Process Meter

**Quick Overview**

**Input:** Dual 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)

**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)

**Case:** Smooth die-cast aluminum explosion-proof

**Power:** 85-265 VAC or 12/24 VDC option

**Operating Temperature:** -40 to 65°C

**Features**

- Addition, difference, absolute difference, average, multiplication, division, min of A or B, max of A or B, draw, weighted average, and ratio math functions
- Signal input conditioning for flow & round horizontal tanks
- Multi-pump alternation control
- Isolated 24 VDC @ 200 mA transmitter power supply
- SafeTouch® through-glass button programming
- 4 on-board digital inputs and outputs
- Modbus® RTU communication protocol
- SunBright display

**Options**

- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
PD8-6080 ProtEX-MAX Super Snooper Modbus Scanner

Quick Overview
Input: Modbus® RTU;
Dual 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V)
Display: Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Features
• Master, slave, or snooper mode
• Scan up to 16 PVs
• Programmable function keys
• SafeTouch® through-glass button programming
• 4 on-board digital inputs and outputs
• SunBright display

Options
• 4-20 mA output with isolated 24 VDC @ 40 mA power supply
• 2 or 4 form C internal relays

PD8-6081 ProtEX-MAX F&I Super Snooper Modbus Scanner

Quick Overview
Input: Modbus® RTU;
Dual 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V)
Display: Dual-line 6-digit, 0.60" (15 mm) feet & inches upper display, & 0.46" (12 mm) lower display
Case: Smooth die-cast aluminum explosion-proof
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Features
• Master, slave, or snooper mode
• Scan multiple PVs
• Level and volume
• Programmable function keys
• SafeTouch® through-glass button programming
• 4 on-board digital inputs and outputs
• SunBright display

Options
• 4-20 mA output with isolated 24 VDC @ 40 mA power supply
• 2 or 4 form C internal relays
PD8-6200 ProtEX-MAX Analog Input Rate/Totalizer

Quick Overview
Input: 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)
Display: Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Features
• Displays rate and total simultaneously
• Count up or down, total & grand total
• Open channel flow with programmable exponent
• 32-point linearization with free software
• Square root extraction
• Total, grand total, or non-resettable grand total
• Isolated 24 VDC @ 200 mA transmitter power supply
• SafeTouch® through-glass button programming
• 4 on-board digital inputs and outputs
• Modbus® RS-485 serial communications
• SunBright display

Options
• 4-20 mA output with isolated 24 VDC @ 40 mA power supply
• 2 or 4 form C internal relays
PD8-6210 ProtEX-MAX Analog Input Batch Controller

**Quick Overview**

**Input:** 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)

**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)

**Case:** Smooth die-cast aluminum explosion-proof

**Power:** 85-265 VAC or 12/24 VDC option

**Operating Temperature:** -40 to 65°C

**Features**

- Start, batch, pause, & stop with front buttons
- Display batch total + rate, grand total, batch count or preset
- Single or multi-stage batching with up to 8 relays
- Automatic overflow correction
- Manual control or automatic batching
- Count up or down, total & grand total
- SafeTouch® through-glass button programming
- 4 on-board digital inputs and outputs
- Modbus® RTU communication protocol
- SunBright display

**Options**

- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays

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PD8-6262 ProtEX-MAX Analog Dual-Input Rate/Totalizer

**Quick Overview**

**Input:** Dual 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V); Modbus PV (slave)

**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)

**Case:** Smooth die-cast aluminum explosion-proof

**Power:** 85-265 VAC or 12/24 VDC option

**Operating Temperature:** -40 to 65°C

**Features**

- Display rate, total, or grand total for either channel, or math
- Math functions based on rate, total, or grand total
- Addition, difference, absolute difference, average, multiplication, division, min of A or B, max of A or B, draw, weighted average, ratio, and concentration math functions
- Count up or down, total & grand total
- 5, 10 or 24 VDC isolated flowmeter power supply
- SafeTouch® through-glass button programming
- 4 on-board digital inputs and outputs
- Modbus® RTU communication protocol
- SunBright display

**Options**

- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
**PD8-6300** ProtEX-MAX Pulse Input Rate/Totalizer

**Quick Overview**

**Input:** Pulse, open collector, NPN, PNP, TTL, switch contact, sine wave (coil), square wave; Modbus PV (slave)

**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)

**Case:** Smooth die-cast aluminum explosion-proof

**Power:** 85-265 VAC or 12/24 VDC option

**Operating Temperature:** -40 to 65°C

**Features**

- Displays rate and total simultaneously
- Count up or down, total & grand total
- 5, 10, or 24 VDC flowmeter power supply
- Gate function for rate display of slow pulse rates
- K-Factor, internal scaling, or external calibration
- Can convert pulse input to an isolated 4-20 mA output
- Isolated 24 VDC @ 200 mA transmitter power supply
- SafeTouch® through-glass button programming
- 4 on-board digital inputs and outputs
- Modbus® RTU communication protocol
- SunBright display

**Options**

- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays

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**PD8-6310** ProtEX-MAX Pulse Input Batch Controller

**Quick Overview**

**Input:** Pulse, open collector, NPN, PNP, TTL, switch contact, sine wave (coil), square wave, Modbus PV (slave)

**Display:** Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)

**Case:** Smooth die-cast aluminum explosion-proof

**Power:** 85-265 VAC or 12/24 VDC option

**Operating Temperature:** -40 to 65°C

**Features**

- Start, batch, pause, & stop with front buttons
- Display batch total + rate, grand total, batch count or preset
- Single or multi-stage batching with up to 8 relays
- Automatic overflow correction
- Manual control or automatic batching
- Count up or down, total & grand total
- SafeTouch® through-glass button programming
- 4 on-board digital inputs and outputs
- Modbus® RTU communication protocol
- SunBright display

**Options**

- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
PD8-6363 ProtEX-MAX Pulse Dual-Input Rate/Totalizer

Quick Overview
Input: Dual Pulse, open collector, NPN, PNP, TTL, switch contact, sine wave (coil), square wave, Modbus PV (slave)
Display: Dual-line 6-digit, 0.60” (15 mm) & 0.46” (12 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Features
- Quadrature inputs
- Display rate, total, or grand total for either channel, or math
- Math functions based on rate, total, or grand total
- Addition, difference, absolute difference, average, multiplication, division, min of A or B, max of A or B, draw, weighted average, ratio, and concentration math functions
- Count up or down based on digital input or second input
- 5, 10 or 24 VDC isolated flowmeter power supply
- Convert pulse input or math result to a 4-20 mA output
- SafeTouch® through-glass button programming
- 4 on-board digital inputs and outputs
- SunBright display

Options
- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays

PD8-7000 ProtEX-MAX Temperature Meter

Quick Overview
Input: Thermocouple J, K, T, E, R, S, B, N, C; RTD 100 Ω Pt, 10 Ω Cu, 120 Ω Ni, 1,000 Ω Pt; Modbus PV (slave)
Display: Dual-line 6-digit: 0.60” (15 mm) & 0.46” (12 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -20 to 65°C

Features
- 1° or 0.1° resolution
- Averages up to 10 RTD sensors
- Automatic cold junction compensation
- Interlock relays (force on)
- Programmable function keys
- SafeTouch® through-glass button programming
- 4 on-board digital inputs and outputs
- Modbus® RTU communication protocol
- SunBright display

Options
- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
PD8-765 ProtEX-MAX Process & Temperature Meter

Quick Overview
Input: Process: 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V)
Temperature: Thermocouple J, K, T, E; RTD 100 Ω Pt
Display: 4-digit, 1.20” (30.5 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: 85-265 VAC or 12-36 VDC option
Operating Temperature: 0 to 65°C

Features
• 1° or 0.1° resolution with RTD
• Sunlight readable display
• Maximum/minimum display
• Linear or square root with low-flow cutoff
• Transmitter power option
• SafeTouch® through-glass button programming
• Modbus® RS-485 serial communications
• Flanges for wall or pipe mounting

Options
• 2 relays or 4-20 mA analog output options
• 24 VDC transmitter power supply
• Dual 24 VDC transmitter power supplies

90° Rotatable Display

Explosion-proof. See website for details.

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MULTI-CHANNEL CONTROLLERS

**PD940**
**ConsoliDator 4 Four-Channel Controller (Wall)**

**Quick Overview**
- **Input:** Analog: four 4-20 mA inputs; Pulse: Four 100 mV-p to 15 V-p, 1 Hz to 10 kHz
- **Display:** 4.75" x 3.50" (121 mm x 89 mm), 6-digit
- **Case:** NEMA 1, powder-coated steel
- **Power:** 90-264 VAC or 8-30 VDC
- **Mounting:** Wall
- **Operating Temperature:** 0 to 50°C

**Features**
- Sunlight readable display
- Four pulse and digital inputs
- Nine 10 A relays
- Process/rate & total display
- 32-point linearization
- RS-232 Modbus RTU
- Direct Modbus PV inputs

**PD941**
**ConsoliDator 4 Four-Channel Controller (Panel)**

**Quick Overview**
- **Input:** Analog: four 4-20 mA inputs; Pulse: Four 100 mV-p to 15 V-p, 1 Hz to 10 kHz
- **Display:** 4.75" x 3.50" (121 mm x 89 mm), 6-digit
- **Case:** NEMA 1, powder-coated steel
- **Power:** 90-264 VAC or 8-30 VDC
- **Mounting:** Panel
- **Operating Temperature:** 0 to 50°C

**Features**
- Sunlight readable display
- Four pulse and digital inputs
- Nine 10 A relays
- Process/rate & total display
- 32-point linearization
- RS-232 Modbus RTU
- Direct Modbus PV inputs

**PD980**
**ConsoliDator 8 Eight-Channel Controller (Wall)**

**Quick Overview**
- **Input:** Analog: eight 4-20 mA inputs; Pulse: Four 100 mV-p to 15 V-p, 1 Hz to 10 kHz
- **Display:** 4.75" x 3.50" (121 mm x 89 mm), 6-digit
- **Case:** NEMA 1, powder-coated steel
- **Power:** 90-264 VAC or 8-30 VDC
- **Mounting:** Wall
- **Operating Temperature:** 0 to 50°C

**Features**
- Sunlight readable display
- Four pulse and digital inputs
- Nine 10 A relays
- Process/rate & total display
- 32-point linearization
- RS-232 Modbus RTU
- Direct Modbus PV inputs

**PD981**
**ConsoliDator 8 Eight-Channel Controller (Panel)**

**Quick Overview**
- **Input:** Analog: eight 4-20 mA inputs; Pulse: Four 100 mV-p to 15 V-p, 1 Hz to 10 kHz
- **Display:** 4.75" x 3.50" (121 mm x 89 mm), 6-digit
- **Case:** NEMA 1, powder-coated steel
- **Power:** 90-264 VAC or 8-30 VDC
- **Mounting:** Panel
- **Operating Temperature:** 0 to 50°C

**Features**
- Sunlight readable display
- Four pulse and digital inputs
- Nine 10 A relays
- Process/rate & total display
- 32-point linearization
- RS-232 Modbus RTU
- Direct Modbus PV inputs
PD650  2.3” (57.3 mm) Large Display Process Meter

Quick Overview
Input: 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V)
Display: 2.3” (57.3 mm), 4½ digits
Case: NEMA 4X aluminum
Power: 115/230 VAC or 22-28 VDC
Operating Temperature: -20 to 65°C

Features
• Programmable exponent for weirs & flumes
• 6-digit display for total
• Two 24 VDC transmitter power supplies

Options
• 200 mA transmitter power supply
• 2 or 4 relays & 4-20 mA output

PD655  1.0” (25.4 mm) Large Display Process Meter

Quick Overview
Input: 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V)
Display: 1.0” (25.4 mm), 4½ digits
Case: NEMA 4X high impact plastic
Power: 115/230 VAC or 22-28 VDC
Operating Temperature: -20 to 65°C

Features
• Programmable exponent for weirs & flumes
• 6-digit display for total
• Two 24 VDC transmitter power supplies
• Pump alternation

Options
• 200 mA transmitter power supply
• 2 or 4 relays & 4-20 mA output
PD540 Nova Series Digital PID Controllers

**Quick Overview**
- **Input:** Universal process & temperature
- **Display:** Dual, 4-digit
- **Case:** 1/16, 3/16, 1/8, and 1/4 DIN
- **Power:** 100-240 VAC
- **Operating Temperature:** 10 to 50°C

**Options**
- Digital inputs
- Heating and cooling
- RS-485 serial communications

**Features**
- Auto-tuning PID
- Easy & quick set point changes
- Relay & analog outputs standard
- High accuracy
- IP55 & IP65 fronts
- Free operating & data logging software

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PD550 Nova Series Ramp & Soak Controllers

**Quick Overview**
- **Input:** Universal process & temperature
- **Display:** Dual, 4-digit
- **Case:** 1/16, 3/16, 1/8, and 1/4 DIN
- **Power:** 100-240 VAC
- **Operating Temperature:** 10 to 50°C

**Options**
- Digital inputs or digital outputs
- RS-485 serial communications

**Features**
- Two 15-segment ramp & soak programs
- Relay & analog outputs standard
- High accuracy
- IP55 & IP65 fronts
- Free operating & data logging software

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PD560 Nova Series Digital Meters

**Quick Overview**
- **Input:** Universal process & temperature
- **Display:** Dual, 4-digit
- **Case:** 1/8 and 1/4 DIN
- **Power:** 100-240 VAC
- **Operating Temperature:** 10 to 50°C

**Options**
- Digital inputs
- RS-485 serial communications

**Features**
- Relay & analog outputs standard
- High accuracy
- IP55 & IP65 fronts
- Free operating & data logging software

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PD570 Nova Series Limit Controllers

**Quick Overview**
- **Input:** Universal process & temperature
- **Display:** Dual, 4-digit
- **Case:** 1/16 and 1/4 DIN
- **Power:** 100-240 VAC
- **Operating Temperature:** 10 to 50°C

**Options**
- RS-485 serial communications

**Features**
- Latching limit relay
- Relay & analog outputs standard
- High accuracy
- IP55 & IP65 fronts
- Free operating & data logging software
PD9500 Precision Calibrator

Quick Overview
Accuracy: 0.0025% of reading (voltage)
Source/read: Thermocouples (13), RTD (9), voltage, current, & pressure (read only)
Interface: Direct keyboard entry, dual displays
Power: 115 or 230 VAC

Features
• Initial calibration accuracy (6 months) to 0.0025% of reading (voltage)
• Custom RTD and SPRT profiles
• Nine setpoints for each output range and type
• Beryllium-copper binding posts reduce thermal EMFs
• RS-232 and IEEE-488 remote control
• Compatible with Fluke Met/Cal® software
• Isolated measurement channel
• Includes NIST traceable certificate with calibration data

PDA1500 High VAC/VDC to Logic Level Converter

Quick Overview
Modes: Straight conversion or series break
Mounting: DIN Rail
Number of Channels: 4
Inputs: 85 to 265 VAC/VDC
Outputs: TTL compatible logic (+5 V)
Power: 12/24 VDC

Features
• Multi-unit (cascade) series break configuration
• Input to output can be inverted
• Interfaces to Vigilante® II annunciators or ProVu® meters
• High electro-optical isolation, input to output