POWERSCOUT™ 3037
REVENUE-GRADE SINGLE-POINT POWER METER

ADAPT TO ANY PROJECT
The PowerScout 3037 comes in four basic configurations depending on whether a display or Ethernet port are desired. Instead of having one specific meter for a single job, the PowerScout 3037 can adapt to nearly any project requirement.

All PowerScout 3037 models have a broadband power supply (80-600VAC) and can be paired with a variety of current transformers, from split cores that measure <1A up to large RoCoils designed for measuring 4000A. In addition, communication protocols are field-selectable. Easily toggle between Modbus or BACnet using ViewPoint software.

QUICK & EASY SETUP
Configuring the PowerScout 3037 for a new project is faster than ever before, thanks to the standard USB port. To configure, simply connect the meter to a PC using a USB cable, then use ViewPoint software to select CT type, communication protocol, and other parameters. The meter is powered by the USB port while connected to a PC. Have several meters that require the same configuration? Save your setup table in ViewPoint and use it over and over.

FASTEST & EASIEST INSTALLATION
The PowerScout 3037 is compact enough to facilitate in-panel mounting. Or, use the built-in DIN rail channel, which is compatible with TS35/7 rail for quick and easy mounting near the circuit panel.

PowerScout instruments are line-powered and do not require external power. Its power supply can accommodate service voltages ranging from 80-600V (phase-to-phase). DENT's patented PhaseChek™ circuitry includes a 3 bi-color LED indicator display that confirms proper CT-to-phase placement and orientation.

Use the standard USB connection to easily power and configure the PowerScout 3037 at your office or in the field. Once connected to the panel, USB can also be used to verify setup and check real-time values.

POWERSCOUT 3037 ANATOMY

Optional Display for quickly reading real-time values & performing diagnostics

PhaseChek™ LEDs to verify CT-to-phase installation

Angled Mounting Tabs for easy installation in or near the panel.

Built-In DIN Rail Channel (not pictured)

Modbus/BACnet Address Switches

Serial RS-485 connection is standard

Standard pulse output for sending pulses to an external device

CT Connectors: Easily switch between RoCoil & Split Core CTs

Voltage Connection: Broadband power supply operates on services up to 600VAC

Standard USB powers the meter and allows for easy setup.

Optional Ethernet for BACnet IP or Modbus TCP

Display Function Button (if equipped) to scroll through display information

REVENUE-GRADE PERFORMANCE
The PowerScout 3037 features revenue-grade ANSI C12.20-2010 qualified Class 0.2 performance. Paired with the appropriate DENT CTs, the PowerScout 3037 is ideal for high-accuracy applications like demand response or tenant submetering.

COMMUNICATIONS: INDUSTRY-STANDARD MODBUS OR BACNET
Communications interface to the PowerScout 3037 can be accomplished through serial RS-485 or USB, or optional Ethernet. The PowerScout can use either the BACnet IP or MS/TP protocol or Modbus TCP or RS-485 protocol for sending commands or retrieving data.

STANDARD PULSE OUTPUT
Send kWh or other pulses to an external device. The pulse output is used to generate system kWh pulses for devices, such as data loggers, that can accept pulses, but do not have BACnet or Modbus capability.

POWERSCOUT™ SPECIFICATIONS

TECHNICAL

SERVICE TYPE	Single Phase, 3 Phase - 4 Wire (WYE), 3 Phase - 3 Wire (Delta)
POWER	From L1 Phase to L2 Phase. 80-600VAC CAT III 50/60Hz, 70mA Max. Non-user replaceable .5 Amp internal fuse protection
POWER OUT	PS3037: Unregulated 5VDC output, 140 mA Max, resetting fuse PS24: Unregulated 5VDC output, 500 mA Max
VOLTAGE CHANNELS*	80-346 Volts AC Line-to-Neutral, 600V Phase-to-Phase, CAT III
CURRENT CHANNELS	PS3037: 3 channels, 0.52 VAC max, 333 mV CTs, 0.4,000A PS24: 3 24 channels, 0.67 VAC max, 333 mV CTs, 0-5,000A
MAXIMUM CURRENT INPUT	PS3037: 158% of current transducer rating (mV CTs) to maintain accuracy. Measure up to 4000A with RoCoil CTs PS24: 200% of current transducer rating (mV CTs) Measure up to 5000A with RoCoil CTs
MEASUREMENT TYPE	True RMS using high-speed digital signal processing (DSP)
LINE FREQUENCY	50/60 Hz
WAVEFORM SAMPLING	200 samples/60Hz waveform, 240 samples/50Hz waveform PS3037: 2 waveforms/second, PS24: 1 waveform/second
PARAMETER UPDATE RATE	1 second
MEASUREMENTS	Volts, Amps, kW, kWh, kVAR, kVARh, kVA, kVAh, aPF, dPF.
ACCURACY	PS3037: 0.2% (<0.1% typical) ANSI C12.20-2010 Class 0.2 PS24: 0.5% ANSI C12.20-2010 Class 0.5 for V, A, kW, kVAR, kVA, PF.
RESOLUTION	0.01 Amp, 0.1 Volt, 0.01 watt, 0.01 VAR, 0.01 VA, 0.01 Power Factor depending on scalar setting
LED INDICATORS	Bi-color LEDs (red and green): 1 LED to indicate communication, 3 LEDs for correct CT-to-phase installation (per meter element).
PULSE OUTPUT	PS3037: Open Collector, 5mA max current, 30V max open voltage PS24: Open Collector, 75mA max current, 40V max open voltage

COMMUNICATIONS

DIRECT	User selectable Modbus/BACnet Master Slave Token Passing protocol (MS/TP) or (optional) BACnet IP/Modbus TCP over Ethernet.
MAX DISTANCE	1200 meters with Data Range of 100K bits/second or less
BAUD RATE	9600 (Modbus default), 19200, 38400, 57600, 76800 (BACnet default), 115200
DATA BITS	8
PARITY	None, Even, Odd
STOP BIT	2, 1
DATA FORMATS	Modbus or BACnet

MECHANICAL

OPERATING TEMPERATURE	-20° to 60°C (-4° to 140°F)
HUMIDITY	5% to 95% non-condensing
ENCLOSURE	PS3037: ABS Plastic, 94-V0 flammability rating PS24 (optional): PC UL 94 5V
WEIGHT (EXCLUDING CTs)	PS3037: 340 g (12 ounces) PS24 Without Enclosure: 369 g (13 oz) PS24 With Enclosure: 610 g (21.5 oz)
DIMENSIONS	PS3037: 24.2 x 8.5 x 4.0 cm (9.5" x 3.3" x 1.6") PS24 Without Enclosure: 25.5 x 16.5 x 3.2 cm (10.0" x 6.5" x 1.3") PS24 With Enclosure: 27.8 x 18.8 x 13.0 cm (10.9" x 7.4" x 5.1")

VIEWPOINT SOFTWARE

OPERATING SYSTEM	Windows® 8, Windows® 7 (32/64 bit), Windows® Vista (32/64 bit), or Windows® XP
COMMUNICATIONS	RS-485 & USB standard. Ethernet available. One USB Port required on PC.

SAFETY

POWERSCOUT 3037 (All) PS3037-S-N, PS3037-S-D, PS3037-E-N, PS3037-E-D	UL Listed and CE Mark Conforms to UL Std 61010-1 Certified to CSA Std C22.2 No. 61010-1
POWERSCOUT 24 N Serial PS24-N-S (circuit board only)	UL Recognized, CE Mark Conforms to UL Std 61010-1 Certified to CSA Std C22.2 No. 61010-1
POWERSCOUT 24 D Serial PS24-D-S (with indoor enclosure)	UL Listed, CE Mark Conforms to UL Std 61010-1 Certified to CSA Std C22.2 No. 61010-1
POWERSCOUT 24 N Ethernet PS24-N-E (circuit board only)	UL Recognized Conforms to UL Std 61010-1 Certified to CSA Std C22.2 No. 61010-1
POWERSCOUT 24 D Ethernet PS24-D-E (with indoor enclosure)	UL Listed Conforms to UL Std 61010-1 Certified to CSA Std C22.2 No. 61010-1

MODBUS REGISTER/BACNET OBJECT DESCRIPTIONS (PARTIAL LIST)

System True Energy +/- (kWh)	Individual Phase to Phase Voltages
Instantaneous Total True Power +/- (kW)	Individual Phases True Energy +/- (kWh)
Peak Demand (Adjustable Window) (kW)	Individual Phases True Power +/- (kW)
Maximum Instantaneous Power +/- (kW)	Individual Phases Reactive Energy +/- (kVARh)
Minimum Instantaneous Power +/- (kW)	Individual Phases Reactive Power +/- (kVAR)
System Reactive Energy +/- (kVARh)	Individual Phases Apparent Energy kVAh)
System Apparent Energy (kVAh)	Individual Phases Apparent Power (kVA)
System Apparent Power (kVA)	Individual Phases Apparent Power Factor (aPF)
System Displacement Power Factor (dPF)	Individual Phases Displacement Power Factor (dPF)
System Apparent Power Factor (aPF)	Individual Phases Line to Neutral Voltages (Volts)
Average Line to Line Voltage (Volts)	Individual Phases Line to Line Voltages (Volts)
Average Line to Neutral Voltage (Volts)	PS3037: Net system true energy (kWh)

* For DC applications, please see manual for full specifications and application details. Use on 120/240V, 480/277V, 580/355V, or 380/220V services. 50 or 60 Hz.

VIEWPOINT™ SOFTWARE: QUICK AND EASY SET-UP, CONFIGURATION, & DIAGNOSTICS

DENT's ViewPoint software utility allows you to easily configure the PowerScout for the connected CTs and to check real-time values to ensure that the meter is properly configured. ViewPoint is the quick and easy way to:

- Switch between communication protocols
- Verify meter installation
- Check real-time values before leaving the job site
- Read and write to specific registers
- Set the data scalar setting
- Update PowerScout firmware

POWERSCOUT™ SERIES
NETWORKED POWER METERS

HIGH PERFORMANCE INSTRUMENTS FOR ENERGY MEASUREMENT

INDUSTRY'S MOST DEPENDABLE & PRECISE ENERGY MEASUREMENT
The PowerScout series networked power meters are designed to provide timely and accurate consumption data to gain the upper hand on electrical costs in today's escalating energy market. PowerScout meters can capture kWh/kW energy and demand data as well as virtually all relevant energy parameters for diagnostics and monitoring on three-phase or single-phase circuit installations. The PowerScout's flexibility, size, and ease-of-use make them ideal tools for gathering detailed consumption data in commercial, industrial, government and retail environments.

MAXIMUM VERSATILITY & FLEXIBILITY
Every PowerScout features field-selectable Modbus or BACnet protocols, interchangeable split-core or flexible RoCoil CTs, and direct USB setup. Connect via RS-485 or optional Ethernet and use the optional back-lit display (PS3037) to verify setup and check real time values. The PowerScout makes over 50 total electrical measurements, including energy and demand.

FEATURES
- PowerScout meters monitor voltage, current, power, energy, and many other electrical parameters on single and three-phase systems.
- The PowerScout uses either BACnet or Modbus protocol and features digital pulse outputs. Available with Serial-only or with Ethernet.
- Positive and negative Modbus registers/BACnet objects allow for the PowerScout to be used on net metering projects.
- Mix-and-match a full range of Split Core or RoCoil™ Rogowski-style CTs
- PhaseChek™ LED indicators confirm proper CT orientation.
- Line-Powered*: 80-600V Phase-to-Phase Power Supply.
- Data updates occur once every second.
- PS3037: Revenue grade. ANSI C12.20-2010 Class 0.2
- PS24: Revenue grade. ANSI C12.20-2010 Class 0.5
- PS3037: DIN rail or panel mount
- PS3037: Optional back-lit display available for verifying setup and checking real time values.
- UL and CE Mark†

APPLICATIONS
- Tenant Submetering
- Net Metering
- Data Center Monitoring
- Commercial
- Retail
- Industrial

*Use on 120/240V, 480/277V, 580/355V, or 380/220V services, 50 or 60 Hz.

† PS3037 and PS24D (with enclosure) are UL Listed. PS24N (without enclosure) is UL Recognized. CE Mark on all PS3037 and PS24 Serial models.

WARRANTY 5 YEAR

LISTED E186827