

POWERSCOUT™ FLEX 48

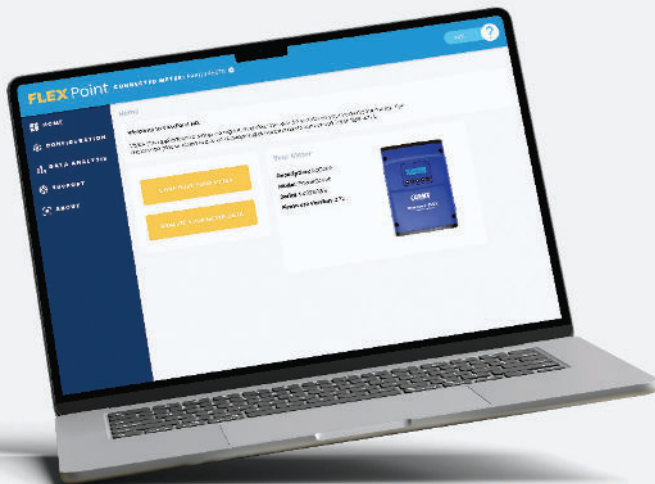
Energy Metering Made Simple

REVENUE GRADE INSTRUMENTS FOR SUPERIOR ENERGY MEASUREMENT



48
channels

PowerScout™ FLEX 48 is DENT's next-generation multi-circuit submeter engineered for faster setup, smarter commissioning, and clearer system insight. Replacing the PowerScout™ HD, FLEX simplifies installation, enhances configuration workflows, and delivers accurate, real-time data across a wide range of electrical environments. Whether deploying in the field or overseeing large-scale facilities, FLEX provides the flexibility, performance, and control today's teams need.



FLEXPoint™ (PC Software)

Choose the method that fits your workflow with no compromises. A completely rebuilt configuration experience with:

- A modern, cleaner interface
- Guided workflows that reduce setup time
- Smarter defaults to eliminate guesswork
- Intuitive Setup Tools Built for Real-World Workflows



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APPLICATIONS

- Hospitals
- Data Centers
- Tenant Submetering
- Bi-Directional Metering
- Commercial & Industrial Monitoring
- HVAC, Pumps, Motors & Equipment Loads



FEATURES

- **48 channels:** Multi-circuit submeter monitors voltage, current, power, energy, and many other electrical parameters on any combination of single and/or three-phase systems.
- **Dual Voltage Inputs:** allow the PowerScout™ FLEX 48 meter to be used on two systems simultaneously.
- **Line-Powered:** 90-600V Phase-to-Phase Power Supply.
- **Revenue-Grade Accuracy:** Meets ANSI C12.1 -2024 Class 0.2 (dependent on CT selection).
- **Flexible Hardware Options:** Available with UL 94-V0 enclosure or as a circuit board on a mounting plate that helps facilitate easy, safe installation.
- **High-Voltage Protection:** TouchSaf™ High-Voltage Cover offers additional level of protection.
- **Dual-Protocol Communications:** The PowerScout™ FLEX 48 uses both BACnet or Modbus protocol and features 2 digital pulse input ports. All models feature both serial and Ethernet.
- **Floating Point Data Format:** IEEE-754 data format allows for bidirectional monitoring and eliminates scaling factors.
- **Universal CT Compatibility:** Mix-and-match a full range of CTs including Solid Core, Split Core or RōCoil™ (Rogowski Coils). Revenue-grade options available.
- **Real-Time Display:** Integrated LCD shows meter status, configuration, and live metered values.
- **PhaseChek™ Verification:** Confirms correct CT orientation and phase matching. Reduces installation errors.
- **Certified and Compliant:** UL Listed (enclosure), UL Recognized (plate/board), and CE Marked.

FLEXPoint™

FEATURES



FLEXPoint™ GO Web Server

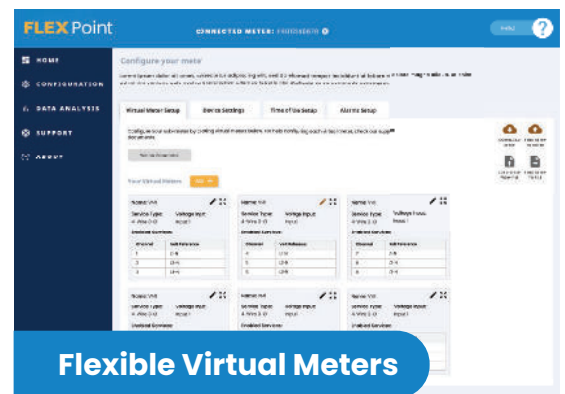
- PowerScout™ FLEX on the Go.
- Configure the meter instantly from any browser, no installation required.
- Perfect for quick changes, onsite validation, and field troubleshooting.

Flexible Virtual Meters for Cleaner, More Efficient Installations

Assign any CT channel to any load, in any combination. Virtual Meters let you:

- Create single-phase, split-phase, or 3-phase groupings
- Label loads the way your site is organized
- Track those labels everywhere: FLEXPoint™ and FLEXPoint™ GO, the LCD, registers, and the cloud
- Meter multiple loads per device with less hardware

FLEXPoint™ reduces complexity and helps teams design systems that match real-world electrical environments.



Smart Set-up and Labeling System for Clear, Consistent Load Tracking

Say goodbye to time consuming setups and mismatched labels across devices and software.

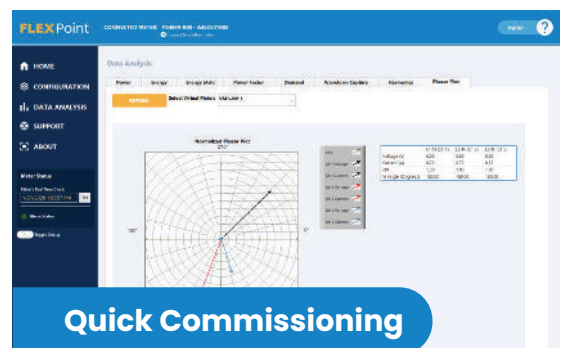
- Save time on every install with smarter setup tools, flexible metering options, and a straightforward UI.
- FLEXPoint™ ensures Virtual Meter names appear consistently across:
 - PC configuration
 - LCD display
 - Exported register data
 - Cloud-integrated systems

Simplified Integration for Faster Commissioning

PowerScout FLEX removes the pain points that slow down integrators.

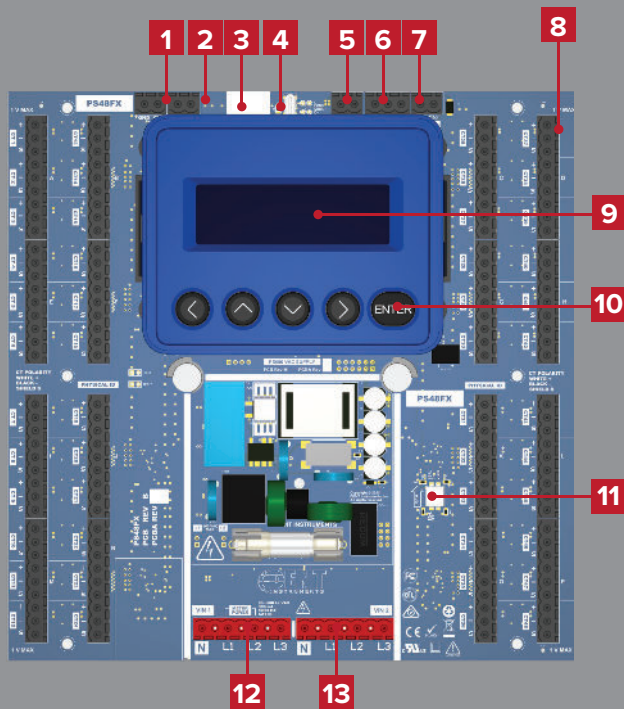
- **Flattened Modbus register map.** All Virtual Meters accessible via a single meter address.
- **Improved performance for system developers.** Faster response times, streamlined register structure, and clear data conventions.

FLEXPoint™ is backward-aware, forward-ready, and easier to drop into any existing workflow.

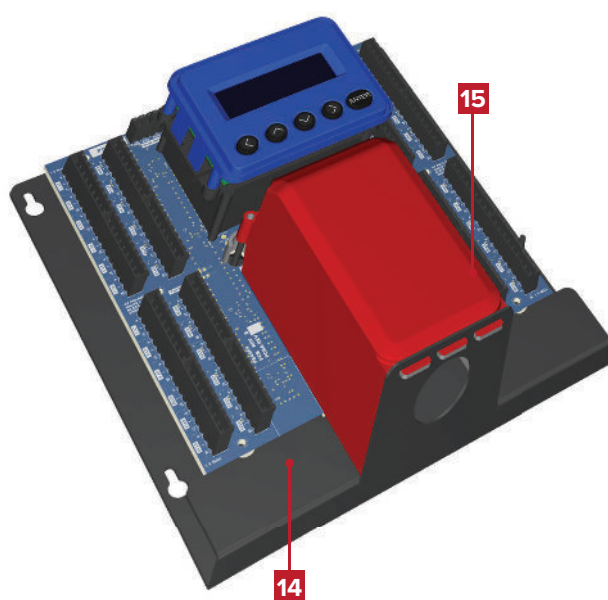


POWERSCOUT™ FLEX 48

ANATOMY



- 1. Pulse Input 1
- 2. Pulse Input 2
- 3. Ethernet
- 4. USB
- 5. 12V Out (2W)
- 6. RS-485
- 7. Alarm
- 8. CT Connections (x48)
- 9. Display
- 10. Navigation Buttons
- 11. Seal Switch (CW&M option only)
- 12. Voltage Input 1
- 13. Voltage Input 2
- 14. Mounting Plate (Optional)
- 15. High Voltage Cover (IP30)
- 16. 1" EMT Conduit Connection
- 17. ABS Plastic Enclosure



QUICK TRANSITION FROM POWERSCOUT™ FLEX

Set Up Faster, Your Way

Configure using FLEXPoint™ (PC software) or FLEXPoint™ GO (any browser)

Meter More with Less Hardware

Use Virtual Meters to group loads however your site is organized

Keep Load Labels Clear Everywhere

Apply one name per load and see it consistently across: Software, Displays, Data exports, and Cloud systems



Detailed information about the PowerScout™ FLEX meter hardware, set-up, and FLEXPoint™ Software can be found in the Operator's Guide.

POWERSCOUT™ FLEX 48

SPECIFICATIONS

TECHNICAL

SERVICE TYPE	Single Phase, Split Phase, Three Phase-Four Wire (WYE), Three Phase-Three Wire (Delta)
POWER	From L1 Phase to L2 Phase. 90-600VAC RMS CAT III 50/60Hz, 500mA AC Max. Use of 12 volt auxiliary output requires 100 VAC minimum input voltage.
AC PROTECTION	0.5A Fuse 200kA interrupt capacity
POWER OUT	Unregulated 12VDC output, 200 mA, self-resetting fuse.
VOLTAGE CHANNELS	90-346 Volts AC Line-to-Neutral, 600V Line-to-Line, CAT III. Two voltage reference inputs.
CURRENT CHANNELS	48 channels, 0.525 VAC max, 333.3 mV CTs, 0-4,000 Amps depending on CT
MAXIMUM CURRENT INPUT	150% of current transducer rating (mV CTs) to maintain accuracy. Measure up to 4000A with RõCoil CTs
MEASUREMENT TYPE	True RMS using high-speed digital signal processing (DSP) with continuous sampling
LINE FREQUENCY	50/60 Hz (45-65 Hz measurable range). Measurement taken LI-N.
WAVEFORM SAMPLING	Continuous 7.2 kHz (No blind cycles)
PARAMETER UPDATE RATE	1 second
MEASUREMENTS	Volts, Amps, kW, kVAR, kVA, aPF, dPF, kW demand, kVA demand, Import (Delivered) kWh, Export (Received) kWh, Net kWh, Import (Delivered) kVAh, Export (Received) kVAh, Net kVAh, Import (Delivered) kVARh, Export (Received) kVARh, Net kVARh, THD, Theta, Frequency. All parameters for each phase and virtual moter
ACCURACY	0.2% ANSI C12.1-2024 Class 0.2
RESOLUTION	Values in IEEE-754 single precision floating point format (32 bit).
DISPLAY	4-line display, tri-color backlight (PhaseChek™)
ALARM OUTPUT	Under Voltage (open collector- 30V DC Max.)
PULSE INPUTS	Two inputs. 3.3V sourcing voltage (current limited) to customer dry contact pulse output. Max pulse rate 10 Hz (50 mSec minimum transition time).

COMMUNICATIONS

HARDWARE	RS-485, Ethernet, and USB (for configuration only)
SUPPORTED PROTOCOLS	Modbus RTU, BACnet MS/TP, Modbus TCP or BACnet IP, DENTCloud (optional)
MAX COMMUNICATION LENGTH	1200 meters with Data Range of 100K bits/second or less
COMMUNICATION RATE (BAUD)	Modbus: 9600, 19200, 38400, 57600, 76800, 115200 baud BACnet: 9600, 19200, 38400, 76800
DATA BITS	8
PARITY	None, Even, Odd
STOP BIT	2, 1
TERMINATION	None provided

MECHANICAL

WIRE CONNECTIONS	12-28 AWG 600 VAC, Voltage connection must be #14 AWG or larger & 600 VAC rated
MOUNTING	Panel Mount/Enclosure
HIGH VOLTAGE COVER	IP30. Available with PS48 Enclosure & Plate Models
OPERATING TEMPERATURE*	-20° to 60°C (-4° to 140°F)**
HUMIDITY	5% to 95% non-condensing
ENCLOSURE	ABS Plastic, 94-V0 flammability rating. Connections: 1" EMT conduit
ENCLOSURE DIMENSIONS	(L) 33.7cm x (W) 25.1cm x (H) 8.0 cm (13.3" x 9.8" x 3.1")
MOUNTING PLATE DIMENSIONS	(L) 26.2cm x (W) 24.1cm x (H) 8.0 cm (10.3" x 9.5" x 3.1")
PCBA DIMENSIONS	(L) 21.6cm x (W) 21.6cm x (H) 6.4 cm (8.5" x 8.5" x 2.5")

CERTIFICATIONS

UL RECOGNIZED (E186827)	Applies to mounting plate and circuit board only version Conforms to UL Std 61010-1 3rd Edition Certified to CSA Std C22.2 No. 61010-1 3rd Edition
UL LISTED (E186827)	Applies to indoor enclosure version Conforms to UL Std 61010-1 3rd Edition Certified to CSA Std C22.2 No. 61010-1 3rd Edition
CE	LVD (EN61010-1), EMC (EN61326-1), RoHS 3 (IEC 63000:2018)
ANSI C12.1 - 2024 CLASS 0.2	NIST Traceable Calibration

FLEXPoint™ SOFTWARE

OPERATING SYSTEM	Windows® 11, Windows® 10
COMMUNICATIONS	USB & Ethernet standard. One USB Port required on PC.
SECURITY	2 levels of PIN protection (Read/Write or Read-Only)

ORDERING PART NUMBERS

PS48FX-C-D-N	POWERSCOUT 48 FX, WITH ENCLOSURE + DISPLAY
PS48FX-C-N-N	POWERSCOUT 48 FX, WITH ENCLOSURE, NO DISPLAY
PS48FX-P-D-N	POWERSCOUT 48 FX, MOUNTING PLATE + DISPLAY
PS48FX-P-N-N	POWERSCOUT 48 FX, MOUNTING PLATE, NO DISPLAY
PS48FX-C-D-N-D	POWERSCOUT 48 FX, WITH ENCLOSURE + DISPLAY, DENTCLOUD ENABLED

*At -20°C, LCD display could be illegible. Meter voltage @ -20°C must exceed 100 VAC to power the meter.
**Colder temperatures require higher voltage to power the meter.



Helping Customers Manage
Energy Costs Since 1988

An ISO 9001: 2015 QMS Certified Company
An ISO 14001: 2015 EMS Certified Company

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