POWER PATROL

Revenue Grade Power Meter

The Setra Power Patrol is every electrical contractor's dream. The Revenue Grade networked 3-phase power meter works with Rogowski Coils and has a small enough form factor to be mounted inside or outside of the panel using either mounting tabs or the DINrail clip making it the easiest installation in the industry.

Rogowski and CT Compatible

The Power Patrol works with either Rogowski Coil "flex" CT's or conventional split-core CT's. The ability to have interchangeable CT's gives added flexibility for last minute changes at the job site. The Power Patrol is embedded with the necessary amplifier/integrator circuity for the Rogowski coil CT's, eliminating the need to provide external power.

Easy USB Configuration

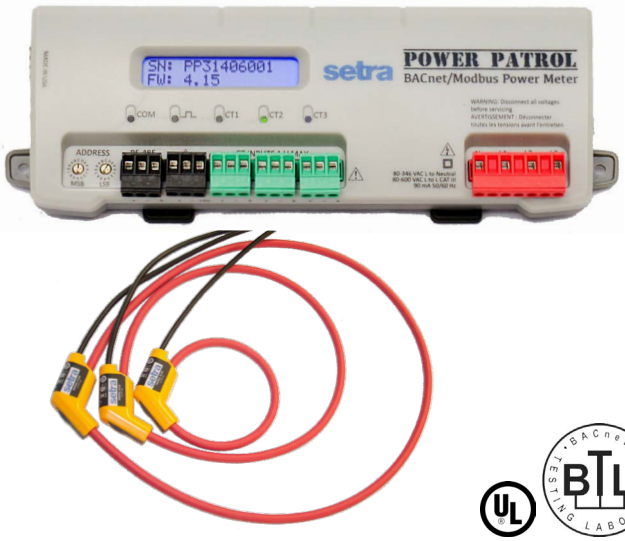
Power and configure the meter through your computer's USB port using the Power Patrol HeadStart software. While other meter's require configuration in a live enclosure, the Power Patrol can be easily configured outside of the panel, eliminating the risk of arc flash. HeadStart can save meter settings, allowing the installer to clone meter profiles quickly and easily.

Field Selectable Communication (4-in-1)

Each Power Patrol comes with field selectable Modbus and BACnet communication. Communications interface to the Power Patrol is through either an RS-485 serial connection (BACnet MS/TP / Modbus) or over Ethernet (BACnet IP / Modbus TCP).

Line Powered From 80-600V

The Power Patrol series instruments are line-powered and do not require external power. Its power supply can accommodate service voltage ranging from 80-600V (phase-to-phase). The Power Patrol has 3 LED indicators (Red/Green) which confirm proper CT-to-phase installation.



- **Configure & Power Through USB**
- **Field Selectable BACnet/Modbus (4-in-1)**
- **5 Year Warranty**

Power Patrol Features:

- Revenue Grade Approved by NRTL
- Configure & Power Through USB
- Eliminate Setup Within Live Enclosure
- UL 610 Rated & BTL Certified
- Phase-Check LED's Confirm Wiring
- Rogowski Coil & Split-Core CT Compatible
- Field Selectable BACnet/Modbus (4-in-1)
- Broadband Power Supply (80-600V)
- Optional Display For Setup and Monitoring
- ANSI C12.20-2010 Class 0.2
- Bidirectional
- DINrail Mount
- Digital Pulse Output

Applications:

- Measurement & Verification
- Demand Response
- Energy Cost Allocation
- Equipment Efficiency Tracking
- Preventative Maintenance

Phone: 800-257-3872 • Fax: 978-264-0292 • setra.com

Power Patrol
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ORDERING INFORMATION

S P P – ☐ – ☐

Model	Communication Port		Display	
SPP= Setra Power Patrol	E	Ethernet & Serial	D	Display
	S	Serial Only (RS-485)	N	No Display

ACCESSORIES

900900-G	USB Communication Cable, Type A to B, Power Patrol
900901-G	USB Flash Drive, HeadStart Software, Power Patrol
SPP-ACC-ENC1	Enclosure Kit
SPP-ACC-LEADS-208	Voltage Leads 208 VAC
SPP-ACC-LEADS-480	Voltage Leads 480 VAC
SPP-ACC-FUSE-208	Fuse Leads 208 VAC
SPP-ACC-FUSE-480	Fuse Leads 480 VAc

MODBUS REGISTER/BACNET OBJECT DESCRIPTION LIST

System True Energy (kWh)	Individual Phase to Phase Voltages
Instantaneous Total True Power (kW)	Line Frequency (Hz)
Peak Demand (Adjustable Window) (kW)	Individual Phases True Energy (kWh)
Maximum Instantaneous Power (kW)	Individual Phases True Power (kW)
System Reactive Energy (kVARh)	Individual Phases Reactive Energy (kVARh)
System Apparent Energy (kVAh)	Individual Phases Reactive Power (kVAR)
System Apparent Power (kVA)	Individual Phases Apparent Energy (kVAh)
System Displacement Power Factor (dPF)	Individual Phases Apparent Power (kVA)
System Apparent Power Factor (aPF)	Individual Phases Apparent Power Factor (aPF)
Average Current (Amps)	Individual Phases Displacement Power Factor (dPF)
Average Line to Line Voltage (Volts)	Individual Phases Current (Amps)
Average Line to Neutral Voltage (Volts)	Individual Phases Line to Neutral Voltages (Volts)
Multiple Meters External Data Synchronization	Individual Phases Line to Line Voltages (Volts)
Refer to Operating Manual For Complete List	

GENERAL SPECIFICATIONS

Technical		Communications	
Service Type	Single Phase, Three Phase-Four Wire (WYE), Three Phase-Three Wire (Delta)	Direct	BACnet IP, BACnet MS/TP, Modbus TCP, Modbus RTU
Power	From L1 Phase to L2 Phase. 80-600VAC CAT III 50/60Hz, 70 mA Max. Non-user replaceable 0.5 Amp internal fuse protection	Max Distance	1200 meters with data rate of 100K bits/second of less
Voltage Channels	80-346 Volts AC Line-to-Neutral, 600V Phase-to-Phase, CAT III	Baud Rate	Modbus: 9600 (default), 19200, 38400, 57600, 76800 & 115200. BACnet: 9600, 19200, 38400 & 76800 (default).
Current Channels	3 Channels, 0.67 VAC max, 333 mV CT's, 0-4,700 Amps depending on CT	Data Bits	8
Maximum Current Input	200% of current transducer rating (mV CTs) Measure up to 5000A with Patrol Flex	Parity	None, Even, Odd
Measurement Type	True RMS using high-speed digital signal processing (DSP)	Stop Bit	2, 1
Line Frequency	50/60	Data Formats	Modbus or BACnet
Waveform Sampling	12 kHz	**Mechanical**	
Parameter Update Rate	.5 seconds	Operating Temperature	-7° to 60° C (-20° to 140° F)
Measurements	Volts, Amps, kW, kWh, kVAR, kVARh, kVA, aPF, dPF (Partial List)	Humidity	5% to 95% non-condensing
Accuracy	0.2% (<0.1% typical) ANSI C12.20-2010 Class 0.2	Enclosure	ABS Plastic, 94-VO flammability rating
Resolution	0.01 Amp, 0.1 Volt, 0.01 watt, 0.01 VAR, 0.01 VA, 0.01 Power Factor depending on scalar setting	Weight	340 g (12 ounces, exclusive of CT's)
LED Indicators	Bi-color LEDs (red and green): 1 LED to indicate communication, 2 LEDs for correct CT-to-phrase installation (per meter element), 1 LED for pulse	Dimensions	23.0 x 9.0 x 4.0 cm, (9.0" x 3.5" 1.5")
Pulse Output	Open Collector, 5mA max current, 30V max open voltage	**Safety**	
		Power Patrol Serial and Ethernet	UL Listed and CE Mark, Conforms to UL Std 61010-1

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