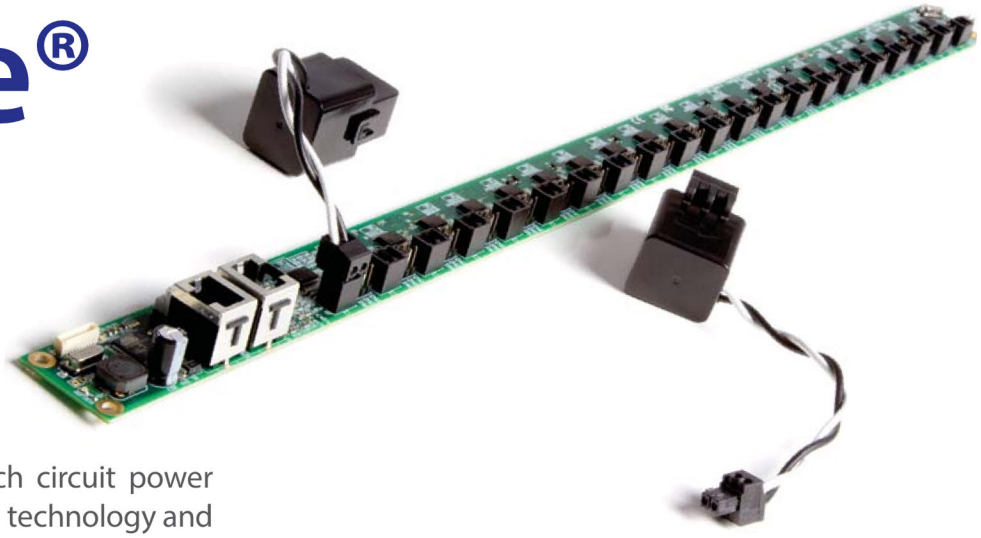
EnerSure® iBCPM



Intelligent Branch Circuit Power Metering

The EnerSure® iBCPM integrated branch circuit power meter is built on the EnerSure® platform technology and is available in 21-circuit strips. Powered by the EnerSure® Enkapsis, the iBCPM provides utility-grade amps, volts, power factor, kW, and kWh data and can support up to four strips (84 circuits) on a single Enkapsis communication chain.

The EnerSure® iBCPM outputs data directly to your server via Ethernet and the power metrics from the iBCPM can integrate with any BMS or DCIM system via Modbus TCP, SNMP and BACnetIP.

FEATURES

- UTILITY REVENUE GRADE 1% ACCURACY (END-TO-END)
- AMPS, VOLTS, POWER FACTOR, AND POWER DATA
- MEASURE UP TO 120 CIRCUITS ON A SINGLE CHAIN
- GREAT FOR OEMS
- INSTALLS IN MOST PANELBOARD CONFIGURATIONS
- USES HIGH ACCURACY SPLIT-CORE CTS THAT EASILY INSTALL INTO THE BOARD

EnerSure® Enkapsis

EnerSure® iBCPM

EnerSure® Bus

EnerSure® BCPM2.0

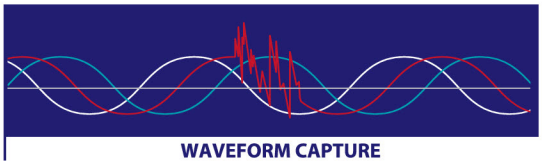
Platform Metering™

Trenpoint's EnerSure® Enkapsis is the base for the entire suite of EnerSure® module devices that include the BCPM2.0, Bus, and iBCPM). Each module can be used to provide utility grade data down to the branch circuit on busway systems, panelboards, RPPs, PDUs, switchgear, and distribution panels.

The EnerSure® platform simplifies installation, integration, and operation of power monitoring deployments by extending a common chipset, user interface, firmware, and software driver across all of our EnerSure® module devices. It is also capable of residing on MODBUS, SNMP, and BACnet simultaneously with a fixed set of registers.

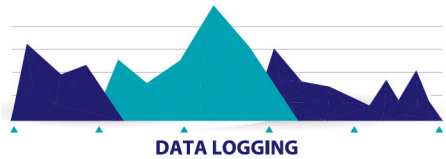
THE NEW STANDARD

TrendPoint's EnerSure® Enkapsis sets a new standard for power quality meters with functionality that extends beyond harmonic data provided by traditional power meters with the added capability of triggering and retrieval of voltage and current waveforms.



WAVEFORM CAPTURE

Enkapsis Waveform Capture capabilities provide a visual representation of power consumption and power quality events in the critical facility.



DATA LOGGING

Enkapsis supports 9 data logs and 1 event log, recording 120 data points at intervals as fast as 30 seconds. These 10 logs can be configured for all data points available for any of the 120 circuits it supports.

EnerSure is covered under United States Patents 6,622,097, 7,039,532 and 7,263,450.

OVER IP GROUP TRENDPOINT™

iBCPM-84 Circuit Shown

EnerSure® iBCPM Product Specifications

EnerSure® Platform Measurement Specifications[1]:

Measured Parameters[2]	*Accuracy*
Voltage (L-L, L-N)	*±1% (Tested to IEC 62053-21)*
Current (Per Phase)	*±1% (Tested to ANSI C12.1)*
Power Factor	*±0.3% (Tested to IEC 62053-21)*
Power (Real, Reactive, Apparent)	*IEC 62053-22 Class 0,5*
Energy (Real, Reactive, Apparent)	*IEC 62053-22 Class 0,5*
Voltage Total Harmonic Distortion (vTHD)	*±0.5% (Tested to IEC 62053-21)*
Current Total Harmonic Distortion (iTHD)	*±0.5% (Tested to IEC 62053-21)*

1. All accuracy specifications are inclusive of the Current Transformers.
2. Provides Average values between polling cycle.

Enkapsis Power Quality Meter Electrical Parameters:

Type	*Specifications*
Voltage Input	*347 V_{AC} L-N, 600 V_{AC} L-L (RMS); CAT III IEC 61010-1*
Current Input	*20 - 10,000A (0-250mV $_{AC}$ CT output)*
Frequency	*50/60 Hz*
Max Power	*4W*
Power Supply Requirements[1]	*24V $_{DC}$ (15W)* *Internal/ External power supply options available*
Safety	*Conforms to ANSI/UL Standard 916 & IEC 60950-1*

1. Control Power provided by V_{REF}

EnerSure® Platform Communications:

Type	*Specifications*
RS-485 Serial Communication Port *(On Enkapsis)*	*Number of Ports: 1* *Protocols: Modbus RTU, Modbus Master, DNP 3.0, GPS, EtherGate, ModemGate.* *Data rates: 115k bps*
10/100mbps Ethernet Port *(On Enkapsis)*	*Number of Ports: 2* *Protocols: TCP/IP, Modbus, SNMP* *10BASE-T, 100BASE-TX: via RJ45 connector*
USB Port *(On Enkapsis)*	*2 (Port 1 is a charging port)*
Environmental Port *(On Enkapsis)*	*Number of Ports: 1* *Protocol: Serial 1-wire*
Bus Port	*TrendPoint bus port for communication with the EnerSure ® Bus, BCPM2.0, and iBCPM products*

EnerSure® Platform Features and Options:

Type	*Standard*	*Optional*
Metering		
Power & Energy Metering	*X*	
Power Quality		
Harmonics Monitoring	*X*	
Harmonics: Individual, Even, Odd, Up to	*45th*	
Sampling Rate (Samples per Cycle)	*133*	
Logging & Recording		
Memory	*4GB*	
Waveform Logging		*X*
Waveform Capture Duration (cycles)	*6*	
Waveform Capture Size	*1.8MB*	
Event Logs	*1*	
Data Logs	*9*	
Logging Rate	*30 second intervals*	
Data Type	*.CSV from web UI*	
GPS time synchronization	*X*	

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UL 508A INDUSTRIAL CONTROL PANEL FABRICATOR

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