

EnerSure® Bus

Busway Power Meter

THE GOLD STANDARD FOR BUS TAP ENERGY MONITORING



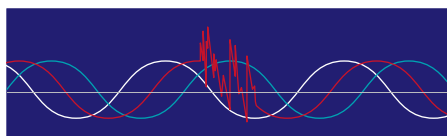
The EnerSure® Bus is built on the EnerSure® platform, which ensures true utility-grade accuracy metrics for amps, volts, power factor, kW, and kWh. Each EnerSure® Bus unit can monitor either 4 or 8 circuits and supports 120/208V, 240/416V, 230/400V and 277/480V busway systems. The EnerSure® Bus unit supports standard CT sizes from 75 to 4000 amps all from the same board.

Up to thirty 4-circuit, fifteen 8-circuit, or any combination of the two types of tap units, totaling up to a maximum of 120 circuits can be connected in a single chain.

<h3>FEATURES</h3>	 <p>EnerSure® Enkapsis</p>	<h3>Platform Metering™</h3> <p>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.</p> <p>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.</p>
<p>UTILITY REVENUE GRADE 1% ACCURACY (END-TO-END)</p>		 <p>EnerSure® iBCPM</p>
<p>AMPS, VOLTS, POWER FACTOR, AND POWER DATA</p>		 <p>EnerSure® Bus</p>
<p>MONITORS ANY COMBINATION OF CIRCUITS (3P+N, L-N, L-L, ETC.) FROM THE SAME BOARD</p>		 <p>EnerSure® BCPM2.0</p>
<p>CONNECT UP TO 120 CIRCUITS ON A SINGLE CHAIN</p>		
<p>DATA AND EVENT LOGGING</p>		
<p>WORKS ON ALL BUSWAY MANUFACTURER'S SYSTEMS</p>		

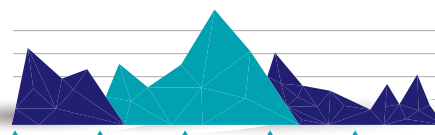
THE NEW STANDARD

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.



There is absolutely NO hot power onboard the EnerSure® Bus. It is the only unit that complies with NFPA70e. Therefore, any maintenance needed on an EnerSure® Bus module only requires Category 1 PPE. Maintenance to other manufactured meters must be made with protective clothing, gear and safety inspections as required by the arc flash level of the voltage reference and NFPA70e.

EnerSure® Bus Product Specifications

EnerSure® Platform Measurement Specifications¹:

Measured Parameters ²	Accuracy
Voltage (L-L, L-N)	±0.5% (Tested to IEC 62053-21)
Current (Per Phase)	±0.5% (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_{scr}

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	

