

SensEnable™ 56WM-P Wireless Power Meter

Infrastructure Management and Monitoring For Business-Critical Continuity



Overview

Emerson's SensEnable 56WM-P powered by Smart Wireless is designed to monitor voltage, current, power, energy, and other electrical parameters on single and three phase electrical systems with revenue-grade accuracy.

The 56WM-P Wireless Power Meter provides continuous monitoring of energy data at submeter levels to ensure power quality, avoid downtime, and increase efficiency.

Primary Benefits

- WirelessHART™ compatible communication technology ensures highly reliable data transmission
- Highly secure network communication via data encryption, critical key management, and end-to-end security features
- "Easy to install" design and mounting features support plug-and-play deployment in new or existing WirelessHART™ mesh networks.
- Diverse number of variables are available to meet users' needs

Benefits Detail

Multiple Variables to Meet Users' Needs

- Single phase or 3-phase line voltage, current, and power factor
- kWh, kVAh, and KVARh to understand energy consumption

Ease of Setup and Options Available

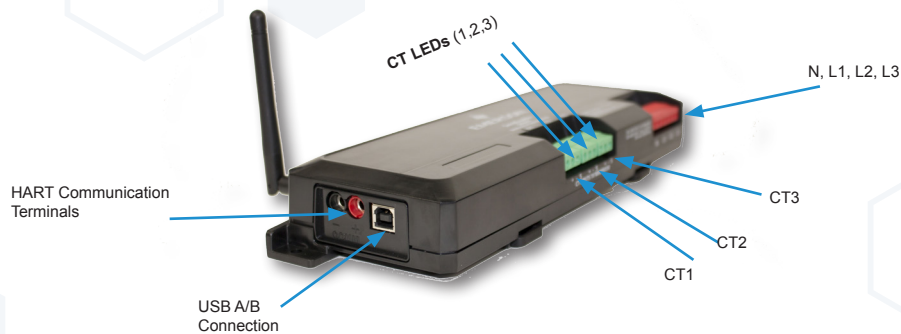
- Phase Check LED lights to ensure proper configuration
- Full range of current transformers (CT's) available
- Passively powered to eliminate unexpected power loss
- Compact design and DIN rail channel mounting

Proven Reliability

- Designed using WirelessHART technology employed in tens of thousands of critical application networks exceeding four billion operating hours
- Self-organizing, self-healing, mesh network ensures optimized connectivity for 99.999% data reliability
- Superior interference tolerance obtained through Time Slotted Channel Hopping (TSCH) providing seamless coexistence with other wireless networks

Secure Network Communications

- Always ON built-in AES 128-bit encryption for confident and secure data protection
- Data and Network Level Security provides critical key management, end-to-end security, and message based integrity checks
- Complies with the open WirelessHART (IEC 62591) International Standard providing connectivity options with existing WirelessHART sensors
- Simple Network ID and Join Key provisioning for rapid connection to the Gateway



Device Specifications

Power Source	From L1 Phase to L2 Phase
USB A/B Connector	Computer connection using an USB A/B cable Can be used to power the meter
N, L1, L2, and L3	Line voltage connection points
CT1, CT2, and CT3	CT connection points
LED's CT1, CT2, and CT3	Phase connection check and health of unit
WirelessHART Mesh Features	Remotely adjustable reporting interval Received Signal Strength Indication (RSSI) available for radio signal monitoring Automatic self healing mesh network Ease of adding and removing sensors
Gateway	Any WirelessHART Gateway
Approximate Dimensions (L x W x H)	26.7 x 9.1 x 4.0 cm (10.5" x 3.6" x 1.6" in)
Operational Environment	Temperature: -20°C to +60°C [20°F to +140°F] / Humidity: 5% to 90% (non-condensing)
Regulatory	Compliant with FCC, UL Listed, and CE Mark Conforms to UL Std. 61010-1, Certified to CSA Std. C22.2 No. 61010-1 Certified to CSA Std C22.2 No. 61010-1, 3rd Edition
Service Type	Single Phase, 3 Phase-4 Wire (WYE), 3 Phase-3 Wire (Delta)
Voltage Channels	80-346 Volts AC Line-to-Neutral, 600V Line-to-Line, CAT III
Current Channels	3 channels, 0.052 VAC max, 333 mV CTs, 0-4000A
Measurement Type	True RMS using high-speed digital signal processing (DSP)
Measurement Variables	Volts, Amps, kW, kWh, kVAR, kVARh, kVA, kVAh Apparent Power Factor (aPF), Displacement Power Factor (dPF). All parameters for each phase and for system total
Line Frequency	50/60 Hz
Waveform Frequency	12 kHz (200 Samples/60Hz, 240 Samples/50Hz)
Resolution	0.01 Amp, 0.1 Volt, 0.01 Watt, 0.01 VAR, 0.01 VA, 0.01 Power Factor depending on scalar setting
Accuracy	0.2% (<0.1% typical) ANSI C1.20-2010 class 0.2
Ingress Protection Rating	20
Enclosure	ABS Plastic, 94-VO Flammability Rating

The warranty of this product stated in the terms and conditions of sale does not extend to any losses or damages due to misuse, accident, abuse, neglect, normal wear and tear, negligence (other than Seller's), unauthorized modification or alteration, use beyond rate capacity, or improper installation, maintenance or application. To the extent that Buyer or its agents has supplied specifications, information, representation of operating conditions or other data to Seller in the selection or design of the product and the preparation of Seller's quotation, and in the event that actual operating conditions or other conditions differ from those represented by Buyer, any warranties or other provisions contained herein which are affected by such conditions shall be null and void. Buyer is solely responsible for determining the suitability of this product for its application. Furthermore, Buyer is solely responsible for the function of the end-use product. Seller terms and conditions apply.

Learn More at www.tod.com