

Grid Edge Power Quality Monitor

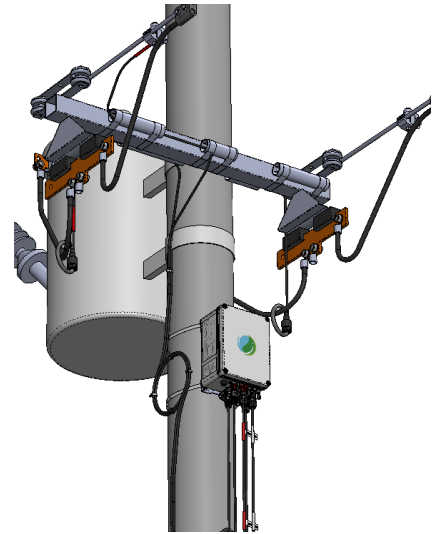
EdgeSensor (200 Series) - Grid and Transformer Monitoring Unit
Models: EE-406



FEATURES

Compact Smart Single Phase Power Quality Monitor

- Monitors and Transmits Full Power Quality Data.
- Grid or Transformer Status Monitoring Unit
- For Single Phase or for Single Phase Center Tapped Installations
- Wide Voltage Input - 100-300VAC
- High Temperature Polycarbonate IP67 enclosure
- Monitors and Transmits Grid or Transformer Status including Full Power Quality Data.
- Full Alarms including - Overloading, Overvoltage, Undervoltage, PF min., Reverse Current.
- Remote Firmware Upload to add upgrade Custom Options and modify Alarm Limits.
- Intelligent Software Control: Network compatible Unit that is Programmable over Internet.
- Encryption AES128 & SHA256 over private APN.
- Quick install Utility Grade Rogowski Current Transformers.
- Events Logging 10 days – Store and Forward.
- EMI Electrical Noise Suppression Networks.
- Line Surge protected - IEC 61000-4-5 to 6KV / 3KA
- Data Comms – Wi-Fi, Cellular (4G Cat-1)
- Unit Ingress Protection: IP67 / UL Type Rating 4
- IEC 61010-1, 61010-2-030
- Patents Pending.



DESCRIPTION

The EdgeSensor (200 Series) is a compact grid Edge Power Quality Monitor that incorporates Edge Electronics Power Quality Grid Edge Technology. It is an intelligent, software-driven, full Power Quality Grid Monitoring Sensor, installed on Pole Transformers that monitors Status and Alarms. The EdgeSensor (200 Series) is specifically designed to be an Intelligent Network Device that monitors and transmits secure full Power Quality Data with additional Status Alarms for Grid Edge Applications and remote Software updates for additional Custom Features and setting Alarm Limits.

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Electrical Specifications	
Available Configurations	<i>1 Phase, 2 Wire configuration, 2 Phase, 3 Wire configuration</i>
Electrical Frequency	<i>50/60Hz</i>
Rated Voltage	<i>100 - 277 Vac (L1-to-N, Supply Voltage)</i>
Absolute Maximum Voltage Rating	<i>300 Vac (L1-to-N)</i>
Current Full Scale Range	<i>800 Amps RMS</i>
Lightning Strike	<i>Power line surge protected - IEC61000-4-5</i>
Voltage Accuracy	<i>± 1%</i>
Power & Energy Accuracy	<i>± 0.5% + 0.5% of Current Full Scale</i>
Power Factor Accuracy	<i>± 1 degree</i>
Power Quality Measurements	<i>Voltage, Current, Power, Energy, vTHD, iTHD, individual harmonics</i>
Reporting Interval	<i>5min transmit time</i>
Alarms and Event Logging	
Grid Power Quality Alert	<i>Voltage Imbalance, Maximum vTHD, Over-voltage, Under-voltage, Voltage Swell, Voltage Sag, Voltage Flicker Current Imbalance, Maximum iTHD, Reverse Current Flow, Low Power Factor Over-frequency, Under-frequency</i>
Transformer Asset Management	<i>Overload, Peak demand Alert, Over-current, Fault Current Reading, No Current Reading No Voltage Reading</i>
Measured Parameters	<i>V, I, PF, kW, kVA, kVAR, Energy, vTHD, iTHD, up to 21st harmonics</i>
Connectivity	
Communications Options	<i>Wi-Fi, Cellular Communications with embedded CAT-1 modem, Private APN with AES128 & SHA256 encryption IPsec tunnel.</i>
Communications Architecture	<i>Periodic reporting to a central IoT Cloud server On demand reporting to a SCADA system through Edge Cloud</i>
IoT Communications	<i>Push notification on Alerts CoAP with DTLS security</i>
Mechanical and Environmental	
Dimensions	<i>L200mm[7.874in] x W150mm[5.905in] x H100mm[3.94in]</i>
Weight	<i>2.0kg[4.4lbs]</i>
IP Rating	<i>IP67 / UL Type Rating 4</i>
Power Supply Button	<i>Supported</i>
Operating Temperature and Humidity	<i>-20°C to 60°C[-4°F to 140°F] , 0-95% RH non-condensing</i>
Extended Temperature Rating	<i>-40°C to 60°C [-40°F to 140°F] tested; 70°C [158°F]for 1 hour</i>
Storage Temperature	<i>-40°C to 80°C[-40°F to 176°F]</i>
Operating Altitude	<i>2000m[6561.68ft]</i>

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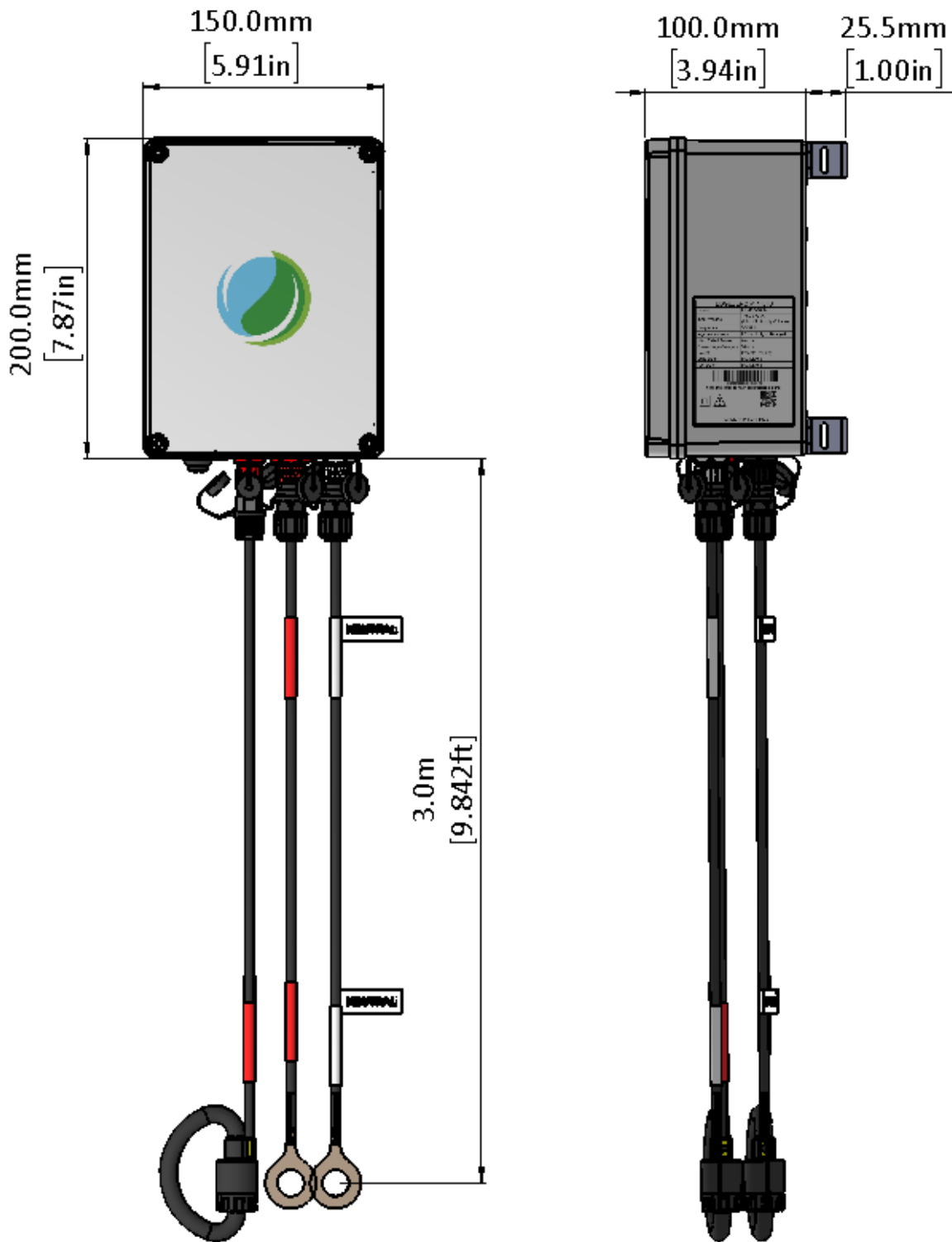


Figure: EdgeSensor (200 Series) with Detachable Accessories

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EdgeSensor (200 Series) Parts List Options for Detachable Sensors

Parts/Accessories	Options
Current Sensor	
Current Range	800 A
Phase Configuration	2-Phase 2 CTs 1-Phase 1 CT
Sensor Length	3.0m[9.842ft]
Internal Diameter	Ø50mm[1.9in]
Voltage Sensor	
Termination	Neutral: Ring terminal (16mm [5/8in] bolt diameter) Line: Ring terminal (16mm[5/8in] bolt diameter) with in-line fuse
Phase Configuration	2-Phase 3 Wires (2 Line Sensing + N) 1-Phase 2 wires (1 Line Sensing + N)
Sensor Length	3.0m[9.842ft]
Sensor Wire Size	1.3mm ² [AWG 16]
Communications	
Communications	4G CAT-1 Variants: North America, Latin America, Europe, Asia
Mounting	
Mounting Type	Pole mount belt & bracket

Contact:

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