

Wireless current sensor: three channel

Monitor granular energy use at a circuit, zone or machine level, in real time.

Our wireless current sensors (CT) simply clip around a three individual cables measuring the alternating current (AC) and the wireless transmitter attaches outside the panel for reliable wireless data transmission. The small, energy harvesting devices use ultra-low power wireless and battery-less technology, making them easy to install and very low maintenance.

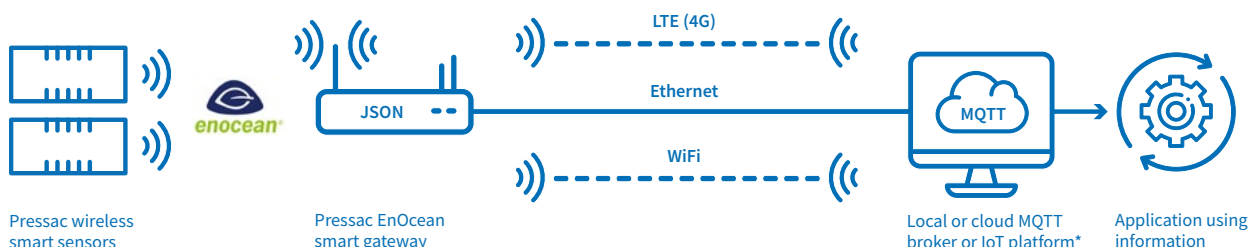
Features

- ⚡ Measures current (50Hz or 60Hz) every 30 seconds in three separate channels
Measurement ranges:
 - 1A-60A (+/- 0.1A or 2%)
 - 2A-200A (+/- 0.1A or 2.5%)
 - 2A-600A (+/- 1A or 3%)
- ⚡ Self-powered using ultra-low energy from the measured conductor, so there's no need for batteries or wiring
- ⚡ Simply clip around cables with no interruption to electrical supply
- ☁ Transmit data wirelessly via EnOcean wireless protocol, which uses internationally approved, licence-free ISM bands



Integrating sensor data

Our smart gateway receives near real-time data from all sensors within range, converts the raw data into an easy-to-use JSON format, then publishes it using MQTT protocol. Data can be sent - via Ethernet, LTE (4G) or WiFi - to any local or cloud MQTT broker; securely to IBM Watson IoT, Microsoft Azure IoT Hub or AWS IoT Core; directly into Google Sheets; or to a Node-RED application.



*Ready-made connections with:



Technical specification

Measurement	<p>Transmission rate: reports average of 5 measurements every 30 seconds</p> <p>Measurement ranges:</p> <ul style="list-style-type: none"> • 1A-60A (+/- 0.1A or 2%, whichever is greater) • 2A-200A (+/- 0.1A or 2.5%, whichever is greater) • 2A-600A (+/- 0.1A or 3%, whichever is greater) <p>AC current frequencies: 50Hz or 60Hz</p>
Power specification	<p>Power: energy harvesting - powered by the measured conductor</p>
Wireless specification	<p>Protocol: EnOcean</p> <p>Radio frequency:</p> <ul style="list-style-type: none"> • 868 MHz for Europe and other countries adopting RED • 902 MHz for USA (FCC specification) and Canada (IC specification) • 928 MHz for Japan (ARIB specification) <p>Range: up to 30 metres in buildings and 300 metres in free field</p> <p>Telegram type: VLD</p> <p>EnOcean Equipment Profile (EEP): D2-32-02</p> <p>Interoperability: EnOcean certification 2.0</p>
Enclosure specification	<p>Material: nylon 66</p> <p>IP rating: IP4X</p> <p>Dimensions of CT clamp:</p> <ul style="list-style-type: none"> • 60A: 25 x 22 x 35 mm (approx) • 200A: 35 x 45 x 65 mm (approx) • 600A: 65 x 41 x 85mm (approx) <p>Dimensions of transmitter: 80 x 55 x 20 mm (approx)</p>
Installation	<p>Fixing: clamp clips around single core cable. Adhesive pads or screws for transmitter</p> <p>Diameter of measurable conductor:</p> <ul style="list-style-type: none"> • 60A: 10mm or less • 200A: 24mm or less • 600A: 36mm or less <p>Operating temperature and humidity range: -5°C to +40°C; 0-85%</p> <p>Storage temperature and humidity range: -20°C to +55°C; 0-85%</p> <p>Environment: indoor</p> <p>Calibration: not required</p>
Compliance	<p>CE approved, RoHS compliant, FCC compliant</p>
Part number	<p>CTV3_[868]-[902]-[928]_3CH_060A, CTV3_[868]-[902]-[928]_3CH_200A, CTV3_[868]-[902]-[928]_3CH_600A</p>

