Wireless Sensors
Technical Specifications

Panoramic Power's electricity sensors are non-invasive, self-powered, miniature wireless current sensors designed for real-time energy monitoring. The sensors clamp directly onto electrical circuit wires without requiring maintenance, batteries, or external power sources. Their wireless design enables seamless integration with energy management systems, delivering critical energy data every 10 seconds.

- ✔ **Easy to Install and Integrate**
- ✔ **Compact and Non-Invasive**
- ✔ **Wireless and self-powered**
- ✔ **High Accuracy** (Compliant with Industry Standards)
- ✔ **Multi-Phase Support** (Single, Dual, and Three-Phase with PAN-42)

PAN-10 & PAN-12 Wireless Current Sensors

Part Number: PAN-10-063-EU/US

Part Number: PAN-12-225-EU/US

Specification	PAN-10 Sensor	PAN-12 Sensor
Dimensions	17 × 20 × 32 mm (0.67 × 0.79 × 1.26 in)	46.2 × 22.8 × 32.6 mm (1.82 × 0.90 × 1.28 in)
Max Hot-Wire Outer Diameter	7 mm (0.28 in)	18.8 mm (0.74 in)
Current Range	0 – 63 A	0 – 225 A
Accuracy	Typically <2% at I > 3 A	Typically <2% at I > 10 A
Min Operating Current	0.5 – 1 A (typical)	0.7 – 1.2 A (typical)
AC Frequency	50 Hz (EU) / 60 Hz (US)	
Transmission Frequency	434 MHz (EU) / 915 MHz (US)	
Transmission Power (ERP)	4 dBm (EU, US)	
Data Transmission Interval	10 seconds	

PAN-14 Wireless High-Current Sensor

Part Number: PAN-14-EU/US

Specification	PAN-14 Sensor
Dimensions	33.8 × 29 × 42.5 mm (1.33× 1.14 × 1.67 in)
Current Input Range	0 – 5 A (up to 10 A peak) (from external CT)
Measurement Range	Determined by external CT
Accuracy	Typically <2% at I > 0.1 A (input from CT)
Min Operating Current	0.03 – 0.05 A (input from CT)
AC Frequency	50 Hz (EU) 60 Hz (US)
Transmission Frequency	434 MHz (EU) 915 MHz (US)
Transmission Power (ERP)	4 dBm (max)
Data Transmission Interval	10 seconds

PAN-42 WIRELESS POWER METER

Part Number:
PAN-42-EU/US

Specification	PAN-42 Sensor
Voltage Inputs	4-wire Wye, 3-wire Delta, single-phase 3-wire, single-phase 2-wire, dual-phase 3-wire
Voltage Levels	120/208 V, 240/416 V, 277/480 V
Frequency Range	48–62 Hz
Current Input Range	0 – 5 A (up to 10 A peak) (from external CT)
Minimum Measurable Power	0.025W at device inputs (per phase)
Outputs	• Active energy (kWh) – accumulated, per phase • True RMS voltage and current – per phase • Active and reactive power – per phase • Power factor – per phase • Line frequency
Accuracy	ANSI C12.1 (Class 1) (assuming CT of class 0.2 or better)
Transmission Frequency	434 MHz (EU) / 915 MHz (US)
Transmission Power (ERP)	0 dBm (max)
Data Transmission Interval	10 seconds

CERTIFICATIONS & COMPLIANCE

USA & Canada

Safety	UL 61010-1, UL 61010-2-030, CAN/CSA-C22.2 No. 61010-1
EMC	FCC Part 15 Subpart B, ICES-003
Radio	FCC Part 15 Subpart C, RSS-210, RSS-Gen

Europe & UK

Safety	EN 61010-1, EN 61010-2-030 (CE)
EMC	EN ETSI 301 489-1, 301 489-3, 61326-1
Radio	EN ETSI 300 220-1, 300 220-2

Other technical ratings

Flammability Rating (Enclosure)	UL94 V-0
Ingress Protection (IP)	IP5X
Operating Temperature	PAN 10/14/42: -25-60°C (-13 – 140°F) PAN 12: -25-50°C (-13 – 122°F)
Humidity Range	5% – 95% (non-condensing)
Storage Temperature	-25 – 65°C (-13 – 149°F)

In all other countries, our local partners are responsible for product certifications.