centrica Business Solutions | Panoramic Power

Wireless Sensor Family Technical Specifications

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

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

PAN-10 & PAN-12 WIRELESS CURRENT SENSORS

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 > 3 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)	0 dBm (EU, US)	
Data Transmission Interval	10 seconds	

PAN-14 WIRELESS HIGH-CURRENT SENSOR

	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	0.5 – 1 A (typical)
AC Frequency	0.03 – 0.05 A (input from CT)
Transmission Frequency	50 Hz (EU) 60 Hz (US)
Transmission Power (ERP)	434 MHz (EU) 915 MHz (US)
Data Transmission Interval	10 seconds

PAN-42 WIRELESS POWER SENSOR

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 (ETL listed)
EMC	FCC Part 15 Subpart B, ICES-003
Radio	FCC Part 15 Subpart C, RSS-210, RSS-Gen

PTCRB Listed

EUROPE & UK

Safety	EN 61010-1, EN 61010-2-030 (CE)
EMC	EN ETSI 301 489-1, 301 489-3, 301 489-17, 613 326-1, 301 489-52, 61000-3-2, 61000-3-3
Radio	EN ETSI 300 220-1, 300 220-2, 300 328

CB CERTIFICATION

Standard	IEC 61010-1, IEC 61010-2-030 (by Intertek Testing Services)

OTHER TECHNICAL RATINGS

Flammability Rating (Enclosure)	UL94 V-0
Ingress Protection (IP)	IP5X
Operating Temperature	-25 – 60°C (-13 – 140°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.