Bridge Gen4 overview

Technical specifications

Our solution provides organisations with unparalleled visibility into their entire energy estate by delivering a wide range of granular and actionable energy intelligence in real-time. The solution detects energy usage via wireless electricity sensors that can be easily attached to circuits. The sensors – in combination with integrated 3rd party meters for gas, heat, air and water – transmit data to the bridge, which delivers this energy information every 10 seconds to PowerRadar®, our cloud-based energy management platform, for analysis. Customers also have the flexibility to use the Modbus TCP interface to export and manage the sensor data locally – directly from the bridge – using the software of their choice.

Bridge

Technical specifications

Physical dimensions (without antennas)	111 x 87 x 35 mm / 4.4 x 3.4 x 1.4 inch
Weight (with antennas)	150 gr/0.33 lb
Power adapter (included)	Input: 100-240 VAC 50-60Hz, Output: 5 VDC
Power consumption	5 W max
Sensor receiver frequency	915 MHz (PAN-2-H-3G-US, PAN-2-H-US) 434 MHz (PAN-2-H-3G-EU) 923 MHz (PAN-2-H-JP)
Sensor reception sensitivity	-105 dBm
Wi-Fi protocol	802.11 b/g/n
Wi-Fi security protocol	WEP64, WEP128, WPA, WPA2, WPA2-Enterprise
Compression	Sensor messages are collected and sent once every 10 seconds to reduce bandwidth
Authentication	CHAP protocol used by the server to verify connected bridge's identity

Key features

- Plug-and-play installation
- Flexible mounting options
- Wi-Fi/Ethernet connectivity
- Cellular (3G GSM) connectivity[1]
- Store capability in case of network loss
- Field-upgradable firmware
- Initial configuration (built-in web interface)
- Easily integrated with PowerRadar®, our cloud-based energy management platform, and 3rd party software using Modbus TCP
- Over-the-air upgrades can be enabled to receive latest bridge firmware automatically from PowerRadar® cloud

Bridge Gen4 overview

Technical specifications

Pulse interface	2x KY inputs (5 V open voltage, 0.9 mA max current, 5 ms minimum pulse width, 100 Hz maximum pulse rate)
Certification[2]	**USA and Canada** Safety: UL 61010-1, UL 61010-2-030 CAN/CSA-C22.2 No. 61010-1, 61010-2-030 (ETL listed) EMC: FCC Part 15 Subpart B, ICES-003 PTCRB listed **Europe** Safety: EN 61010-1, EN 61010-2-030 (CE) EMC: EN ETSI 301 489-1, 301 489-3, 301 489-17, 613 326-1 Radio: EN ETSI 300 220-1, 300 220-2, 300 328 **Australia** Safety: AS/NZS 60950-1 EMC: AS/NZS 2772.2, ARPANSA standard, ACMA EMR Standard Radio: AS/NZS 4268 Telecoms: AS/CA S042.1, AS/ACIF S042.3, AS/CA S042.4 **Russia** EAC compliant CB certification IEC 61010-1, IEC 61010-2-030 by Intertek Testing Services
Flammability rating (enclosure)	UL94 V-0
Operating temperature	-20 – 60°C / -4 – 140°F
Storage temperature	-20 – 70°C / -4 – 158°F

Bridge variants

Regions and countries[2]	Available bridge version
European Union, Israel, Turkey	PAN-2-H-3G-EU V4
USA, Canada and Mexico	PAN-2-H-3G-US V4
Japan	PAN-2-H-JP V4[1]
Brazil	PAN-2-H-US V4[1]

[1]PAN-2-H-US and PAN-2-H-JP do not include cellular module and SIM card slot

[2]Please check local regulations or reach out to our customer services for using the hardware outside the countries or regions listed here

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