SynapSense® 433 MHz Gateway

specifications

The 433 MHz gateway shall be a wireless network-to-Ethernet bridge designed to collect and consolidate data captured from wireless sensors. Data shall be stored locally up to 16,000 messages in case of disconnection from network. The gateway shall transmit data to an online or premises based configuration management / database system. The configuration management / database system shall allow review and export of the information as a data sheet or graph. The system shall alert the user(s) when a measurement exceeds a pre-defined set point. Notifications shall be configured based on time of day parameters.

key features and benefits

Intelligent hardware:	Collects, consolidates, and relays data from and manages the SynapSense® 433 MHz wireless network
433 MHz frequency:	Provides 250-300 ft wireless range non-line of sight/indoors for greater penetration through walls, ceilings and floors to help improve operational efficiency
PoE powered:	Avoids complex cabling installations, minimizing time, labor and material costs
Data retention:	Designed to buffer, retain and resend data when the Ethernet connection is lost, thereby increasing the resiliency of the network by avoiding loss of critical data
Data acknowledgment:	Sends messages to confirm connection between gateway and sensors to ensure data integrity
Single IP address scalability:	Allows interconnect ability of up to 100 sensors on a single wireless network gateway through one single IP address, reducing the need for separate IP ports, IP capital costs and management overhead
Status LEDs:	Provide information on hardware, LAN, and WSN status for quick visual diagnostics
Flexible installation:	Can be mounted with cable ties or optional gateway mounting kit for convenience

applications

The SynapSense® 433 MHz Gateway is part of the Panduit® SynapSense® 433 MHz Wireless Monitoring System which provides a low-cost, easy-to-deploy solution to gather, communicate, and visualize data within the facility to improve reliability, product quality, operational efficiency and energy optimization. The gateway collects data from wireless sensors via a 433 MHz wireless network, processes raw data and delivers it via Ethernet to the server.

The system allows for complete configuration and customization at a sensor, local network, or client-wide level, making it ideal for applications such as: energy management, predictive maintenance, food safety, and environmental monitoring.

433 MHz Gateway	
PoE gateway with power cords:	IOT-9GWPOE-4

433 MHz Kits	
Monitoring kit (20 temperature sensors, 1 PoE gateway, 1 mounting kit, software, 1st year support):	IOT-9EMON-4
Gateway mounting kit:	IOT-9MT

433 MHz Sensors	
AC current meter, 20 Amp:	IOT-9CM20-4
AC current meter, 150 Amp:	IOT-9CM150-4
DC current meter, 20 mA:	IOT-9CM20M-4
Dry contact sensor:	IOT-9DC-4
High temperature sensor:	IOT-9CHT-4
Open/close sensor:	IOT-9OC-4
Pressure sensor, 300 PSIG:	IOT-9PS300-4
Push button sensor:	IOT-9PB-4
Pulse counter, 1-input:	IOT-9PC01-4
Pulse counter, 4-input:	IOT-9PC04-4
Temperature/ humidity sensor with 3 foot probe:	IOT-9CTHL03-4
Temperature sensor:	IOT-9CT-4
Temperature sensor with 3 foot probe:	IOT-9CTL03-4
Vibration sensor:	IOT-9CVM-4
Voltage meter, 0-5 VDC:	IOT-9VM5-4

Software	
Enterprise software subscription (50 sensor):	IOT-9SW50S
Enterprise software license (250 sensor):	IOT-9SW250
Enterprise software license (2000 sensor):	IOT-9SW2K

T e c h n i c a l   I n f o r m a t i o n

|	
Dimensions	5.5" L x 5.25" W x 1.63" H (139mm L x 133.35mm W x 41.402mm H)
Certifications	CE Certified and complies with ETSI EN 300 220-2 V3.1.1 (2017-02); CISPR 24:2010+A1:2015 / EN 55024:2010+A1:2015; CISPR 32:2012 / EN55032:2012/AC:2013; ETSI EN301 489-1 V2.1.1 (2017-02); ETSI EN 301 489-3 V2.1.1 (2017-03); EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013
Housing	ABS Plastic
Memory	Up to 16,000 messages
Internet Protocol	Supports IPv4 and IPv6
Maximum Weight	0.43Kg (15 oz.)
Power Requirements	5.5 V AC adaptor and 5.5 V PoE adaptor
Environmental	-10 to +70 °C (14 to 158 °F)
IEEE Standard Compliance	IEEE 802.3-2002
RF Data Range	Up to 300 feet (91 m), non-line-of-sight*
Browser	Windows Internet Explorer** 9.x or higher, Mozilla Firefox** 11.x or higher, or Google Chrome 17** or higher
Ethernet	10baseT – 100baseT

* Actual range may vary depending on environment.

** All trademarks, service marks, trade names, product names, and logos appearing in this document are the property of their respective owners.

D i m e n s i o n s
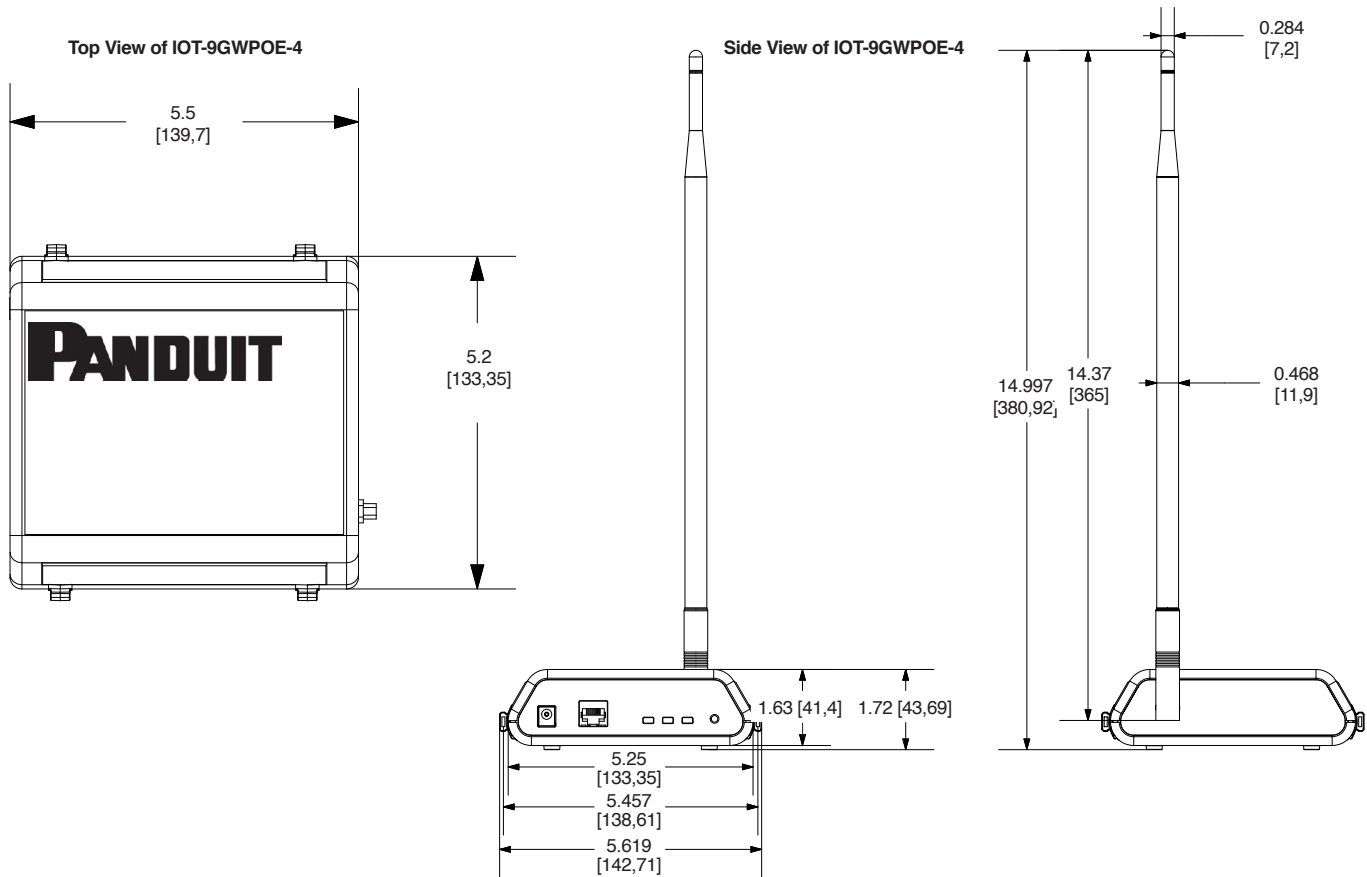
Dimensions are in inches. [Dimensions in brackets are metric.]

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

Visit us at www.panduit.com/synapsense

iai@panduit.com