# SynapSense® 900 MHz Gateway

## specifications

The 900 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® 900 MHz wireless network
900 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<sup>®</sup> 900 MHz Gateway is part of the Panduit<sup>®</sup> SynapSense<sup>®</sup> 900 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 900 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 clientwide level, making it ideal for applications such as: energy management, predictive maintenance, food safety, and environmental monitoring.



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	PoE gateway with power cords:	IOT-9GWPOE
	900 MHz Kits	
	Monitoring kit (20 te	emperature
	sensors, Ĭ PoÈ gate 1 mounting kit, soft	ware,
	1st year support):	IOT-9EMON
	Gateway mounting kit:	IOT-9MT
	900 MHz Sensors	
	AC current meter, 20 Amp:	IOT-9CM20
	AC current meter, 150 Amp:	IOT-9CM150
	<i>DC current meter, 20 mA:</i>	IOT-9CM20M
	Dry contact sensor:	IOT-9DC
	High temperature	
	sensor:	IOT-9CHT
	Open/close sensor: Open/close	IOT-9OC
	sensor - 10 pack:	IOT-9OC-X
	Pressure sensor, 300 PSIG:	IOT-9PS300
	Push button sensor:	IOT-9PB
	Pulse counter, 1-input:	IOT-9PC01
	<i>Pulse counter, 4-input:</i>	IOT-9PC04
	Temperature/ humidity sensor with 3 foot probe:	IOT-9CTHL03
	Temperature/ humidity sensor with 3 foot probe - 10 pack:	IOT-9CTHL03-X
-	Temperature sensor:	IOT-9CT
	<i>Temperature sensor - 10 pack:</i>	IOT-9CT-X
	Temperature sensor with 3 foot probe:	IOT-9CTL03
	<i>Temperature sensor with 3 foot probe - 10 pack:</i>	IOT-9CTL03-X
	Vibration sensor:	IOT-9CVM
	<i>Vibration sensor - 10 pack:</i>	IOT-9CVM-X
	Voltage meter, 0-5 VDC:	IOT-9VM5
	Software	
	Enterprise software license (250 sensor):	IOT-9SW250
	Enterprise software	

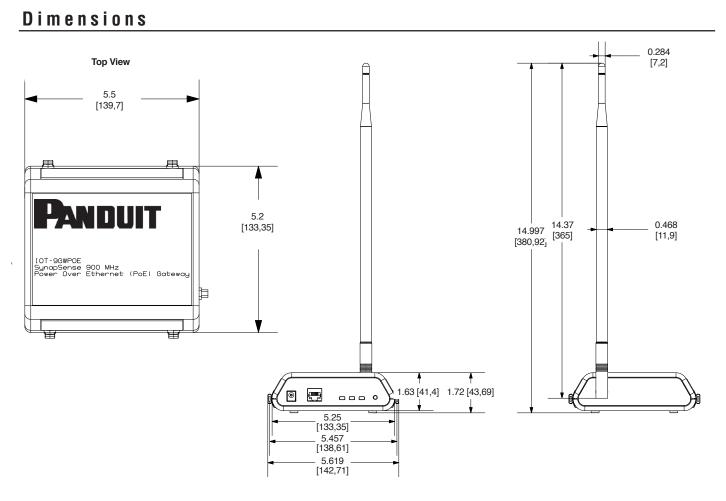
license (2000 sensor): IOT-9SW2K

### **Technical Information**

Dimensions	5.5" L x 5.25" W x 1.63" H (139mm L x 133.35mm W x 41.402mm H)		
Certifications	FCC and IC		
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.

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Dimensions are in inches. [Dimensions in brackets are metric.]

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PANDUIT US/CANADA Phone: 800.777.3300 PANDUIT EUROPE LTD. PAN London, UK Rep Phone: 44.20.8601.7200 Pho

PANDUIT SINGAPORE PTE. LTD. Republic of Singapore Phone: 65.6305.7575 PANDUIT JAPAN PAN Tokyo, Japan Gua Phone: 81.3.6863.6000 Pho

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iai@panduit.com

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