



Ethernet Gateway 4

General Description

Sense IoT's Ethernet Gateway 4 allows your Sense IoT Wireless Sensors to communicate with the Sense IoT Online Wireless Sensor Monitoring and Notification System without the need for a PC. Simply provide power and plug the gateway into an open ethernet network port with an internet connection. It will then automatically connect with our online servers, providing the perfect solution for commercial locations where there is an active internet connection.

The Ethernet Gateway 4 allows your Sense IoT Wireless Sensors to communicate with the Sense IoT portal system via ethernet transmission. Ethernet Gateways are advanced wireless IoT gateways that enable fast time-to-market solutions. Sense IoT's Ethernet Gateway 4 is specifically designed to respond to the increasing market need for global technology that accommodates a variety of vertical IoT application segments and remote wireless sensor management solutions.

Example Applications

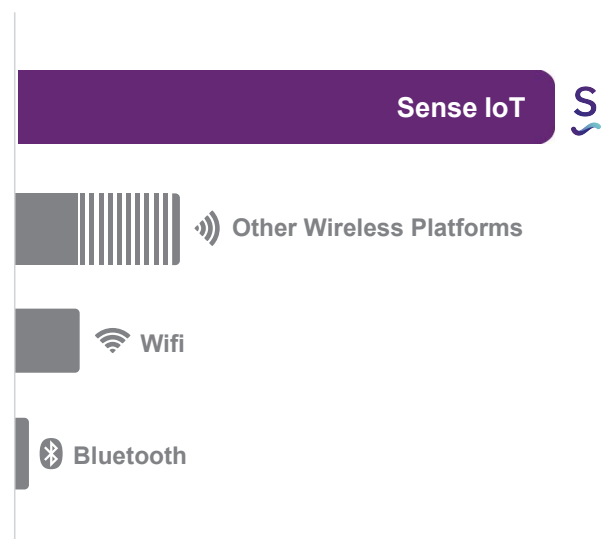
- Remote Location Monitoring
- Shipping and Transportation
- Agricultural Monitoring
- Vacant Property Management
- Vacation Home Property Management
- Construction Site Monitoring
- Data Center Monitoring

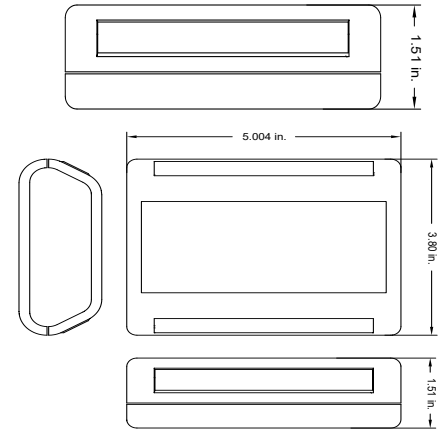
Ethernet Gateway 4 Features

- Wireless range of 350 meters, through 12+ walls *
- Frequency Hopping Spread Spectrum (FHSS)
- Improved interference immunity
- Encrypt-RF® Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
- Up to 50,000 sensor message memory
- Over the air updates (future proof)
- True plug & play, no hassles for internet configuration set-up
- No PC required for operation
- Low-cost cellular service packages
- Local status LEDs with transmission and online status indicators
- AC power supply
- 24 hour battery backup in event of power outage

* Actual range may vary depending on environment.

Wireless Range Comparison





Ethernet Gateway 4 Specifications

Models

Ethernet	MNG2-x-EGW-CCE **
Ethernet + POE	MNG2-x-EGW-CCE-POE **

Ethernet

Hardware	10/100 Ethernet Controller
IEEE Standard Compliance	802.3-2002
Operation	Full- and Half-Duplex
Cross-Over Correction	Automatic MDI/MDI-X
Protocols Supported	DHCP, DNS, NTP, UDP, TCP, SNMP, Modbus TCP
Cable Connector	RJ45
Device Memory	Up to 50,000 sensor messages; varies based on sensor type. (Sensor messages will be stored in the event of Internet outage and transferred when connection is restored)

Power

Input Power	5.0 VDC @ 1A
Ethernet + POE variant	802.3AF Class 1 Compliant

Mechanical

LEDs	Connectivity, Server, Network Status
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Enclosure




Dimensions	5.004 x 3.8 x 1.51 in.
Weight	198 grams

Environmental

Operating Temperature	-20to +70°C
Storage Temperature	-40 to +85°C

Wireless

Transmit Power	25 mW (900 MHz), 17 mW (868 MHz), 6.3 mW (433 MHz)
Antenna Types	Connector: RP-SMA Gain: 2.5 dBi (433 MHz Product) 3.0 dBi (868 MHz, 400 MHz Product)
Wireless Range	350m non-line-of-sight *
Security	Encrypt-RF® (256-bit key exchange and AES-128 CTR)

Certifications    Industry Canada	900 MHz product; FCC ID: ZTL-G2SC1 and IC: 9794A-G2SC1. 868 and 433 MHz product tested and found to comply with: EN 300 220-2 V3.1.1 (2017-02), EN 60950/62368-1
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* Actual range may vary depending on environment.

** x Frequency place holder for global deployments.

Commercial Grade Ethernet Gateways:

Sense IoT commercial grade ethernet gateways are designed for applications in ordinary environments (normal room temperature, humidity and atmospheric pressure). Do not use these gateways under the following conditions as these factors can deteriorate the product characteristics and cause failures and burn-out.

- Corrosive gas or deoxidizing gas – chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxides gas, etc.)
- Volatile or flammable gas
- Dusty conditions
- Under low or high pressure
- Wet or excessively humid locations
- Places with salt water, oils chemical liquids or organic solvents
- Where there are excessively strong vibrations
- Other places where similar hazardous conditions exist

Use these product within the specified temperature range. Higher temperature may cause deterioration of the characteristics or the material quality.

sense^{IoT}

For more information about our products or to place an order, please contact our sales department at 03 8640 0123.

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