



ALTA EGW4 Gateway

General Description

The [ALTA® by Monnit Ethernet Gateway 4 \(EGW4\)](#) allows Monnit Wireless Sensors to communicate with the iMonnit® Online Wireless Sensor Monitoring and Notification System without needing a PC. Simply provide power and plug the gateway into an open Ethernet port with an Internet connection. It will automatically connect with our online servers, providing the perfect solution for Internet-enabled commercial locations.

ALTA Ethernet Gateways are advanced IoT gateways that enable fast time-to-market solutions. Monnit's EGW4 is specifically designed to respond to the increasing market need for global technology that accommodates various vertical IoT application segments and remote wireless sensor management solutions.

Example Applications

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

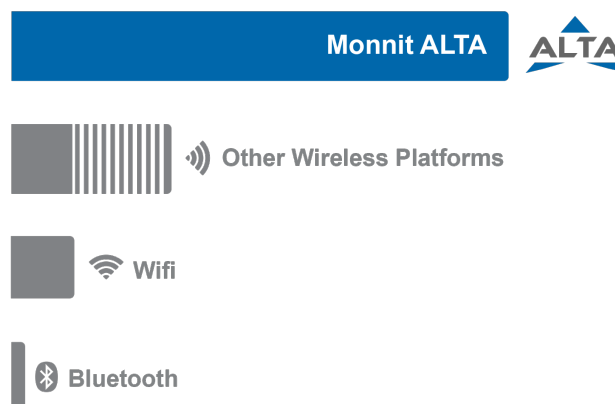
ALTA EGW4 Gateway Features

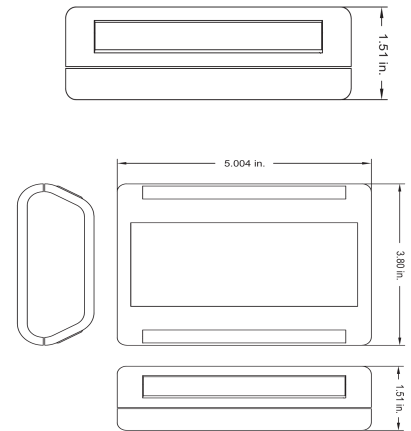
- Wireless range of 1,200+ feet through 12+ walls ¹
- Frequency-Hopping Spread Spectrum (FHSS)
- Best-in-class interference immunity
- Encrypt-RF® Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
- 30,000 sensor message memory ²
- Over-the-air (OTA) updates (future-proof)
- True plug and play, no hassles for Internet configuration setup
- No PC required for operation
- Local-status LEDs with transmission and online status indicators
- AC power supply

¹ Actual range may vary depending on environment

² Total messages in memory varies with sensor type (30K total messages for Temperature)

Wireless Range Comparison





ALTA EGW4 Gateway Specifications

Models

Ethernet (Base Model)	MNG2-9-EGW-CCE, MNG2-8-EGW-CCE, MNG2-85-EGW-CCE, MNG2-4-EGW-CCE
Data Unlock Option	<Base Model>-UNLK
PoE Power Option	<Base Model>-POEA

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	Typically, 30,000 sensor messages; varies based on sensor type. (Sensor messages will be stored in the event of Internet outage and transferred when the connection is restored)

Power

Input Power	5.0 VDC @ 1A
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Mechanical

LEDs	Connectivity, Server, Network Status
Enclosure	ABS
Dimensions	5.004 x 3.8 x 1.51 in.
Weight	7 ounces

Environmental

Operating Temperature	-20 to +60°C (-4 to 140°F)
Storage Temperature	-40 to +85°C (-40 to 185°F)

Wireless

Transmit Power	25 mW (900 MHz), 17 mW (868, 865 MHz), 6.3 mW (433 MHz)
Antenna Types	Connector: RP-SMA Gain: 3.0 dBi (900 Mhz, 868 MHz, 865 MHz) Gain: 2.5 dBi (433 Mhz)
Wireless Range	1,200+ ft. non-line-of-sight ¹
Security	Encrypt-RF® (256-bit key exchange and AES-128 CTR)

Product Certifications



Industry
Canada

Safety: IEC 62368-1
EMC: IEC 55024, IEC 55032, IEC 301489-1, -3, -A, FCC 47 CFR Part 15, subpart B, ICES - 001 Issue 6
RF: 900 MHz product includes model FCC ID: ZTL-G2SC1 / IC: 9794A-G2SC1; 868 MHz product includes Module G2SC1 (IEC 300 220-1, -2); 433 MHz product includes Module G2SC2 (IEC 300 220-1,-2)

¹ Actual range may vary depending on environment.

Optional PoE Splitter Accessory Technical / Device Specifications	
Power	Input: 44-57V
	Output: 5V/2A Max
Ports	Input: RJ45 port
	Output: RJ45 cable
	Output: DC barrel (5.5x2.1 mm)
Transfer Rate	10/100 Mbps
Compatible with the Following Power Source Equipment (PSE)	Midspan: 1/2(+), 3/6(-), Endspan: 4/5(+), 7/8(-)
Dimensions	80x28x21 mm (3.15x1.1x.83 inches)
Cable Length	180 mm (6.6 inches)
Compatible with the Following PoE Standards	IEEE 802.3 af IEEE 802.3 at

Commercial-Grade Gateways

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

- Corrosive or deoxidizing gas – chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxide 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 products within the specified temperature range. Higher temperatures may cause deterioration of the characteristics or the material quality.

Power Supply Advisory

When using the gateway in a remote area or powering the gateway with an inverter, there is a possibility of unbalanced or noisy power (not true sinusoidal AC power). The EGW4 may experience random reboots and Ethernet link instability in these situations. If so, Monnit recommends using the AC/DC power supply for the device. Additionally, power line filters or higher-end power inverters may be required for stable operation.