Remote Monitoring for Business

ETHERNET

ALTA XL® 1-Watt Ethernet Gateway 4K

General Description

The ALTA XL® Ethernet Gateway 4K features a powerful wireless transceiver with up to 1-Watt of transmission power and an amplified receiver. The ALTA XL Ethernet Gateway 4K can send and receive data communications with ALTA® Wireless Sensors 2,000+ feet through 18+ walls in commercial building environments.

The gateway supports up to 4,000 ALTA Sensors, and has the capacity for 1,000 to communicate simultaneously with the iMonnit® IoT 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.

The ALTA XL Ethernet Gateway 4K is an advanced gateway that enables fast, reliable IoT data solutions. It's 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

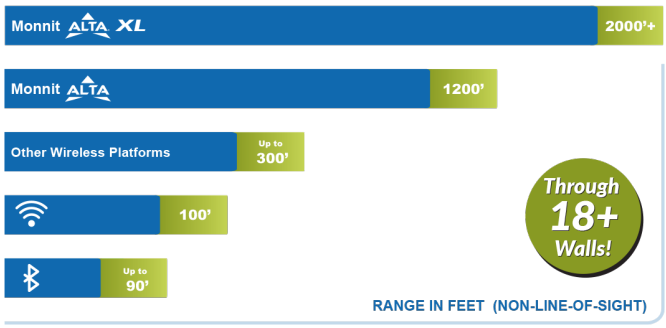
- Remote Location Monitoring
- Facility and Campus Management
- Shipping and Transportation
- Agricultural Monitoring
- Vacant Property Management
- Vacation Home Property Management
- Construction Site Monitoring
- Data Center Monitoring

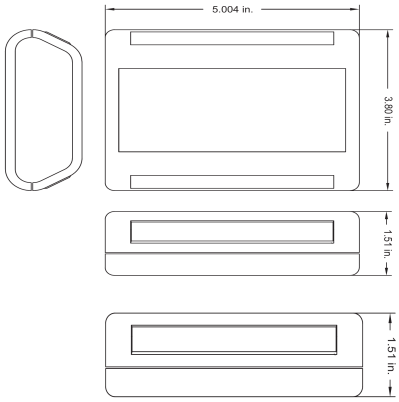
ALTA XL Ethernet Gateway 4K Features

- Wireless range of 2,000+ feet through 18+ 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]
- Supports networks of up to 4,000 sensors
- Capable of managing 1,000 sensors per day
- Supports up to 1000 active sensors per day
- 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 the environment
[2] Total messages in memory varies with sensor type (30K total messages for temperature)

Wireless Range Comparison





ALTA XL® Ethernet Gateway 4K Specifications	
Models	
Ethernet	MNG3-9-E4K-CCE
Features	
Sensors Network List Size	Up to 4000 sensors
Sensors Simultaneously Active	Up to 1000 sensors per day (in a 24 hour period)
Device Memory	Typically, 30,000 sensor messages; varies based on sensor type. (Sensor messages will be stored in the event of an Internet outage and transferred when the connection is restored.)
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
Cable Connector	RJ45
Power	
Input Power	5.0 VDC @ 1A
Mechanical	
LEDs	Connectivity, Server, Network Status
Material	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	+30dBm or 1W
Antenna Types	Connector: RP-SMA Gain: 3.0 dBi (Antenna EIRP: 32.6dBm or 1.8W rating)
Wireless Range	2,000+ ft. non-line-of-sight [1]
Security	Encrypt-RF® (256-bit key exchange and AES-128 CTR)
Certifications	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

[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 ALTA XL Ethernet 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 ALTA XL Ethernet Gateway 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.

MONNIT

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