

ioX XL Ethernet IoT Gateway

General Description

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

The gateway allows ioX Sensors to communicate with the ioX-Connect IoT platform 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 ioX XL Ethernet Gateway 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 Management
- Shipping and Transportation
- Agricultural Monitoring
- Vacant Property Management
- Vacation Home Property Management
- Construction Site Monitoring
- Data Center Monitoring

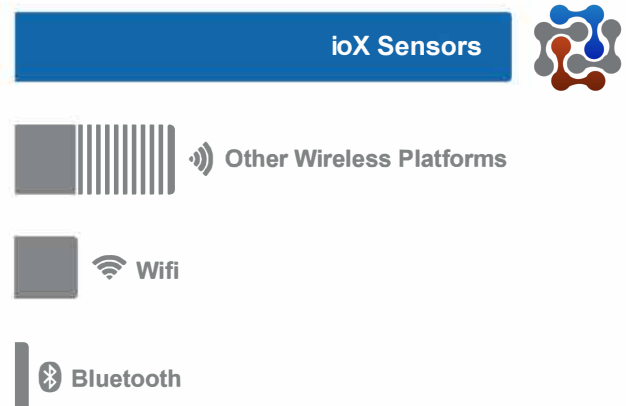
ioX XL Ethernet Gateway Features

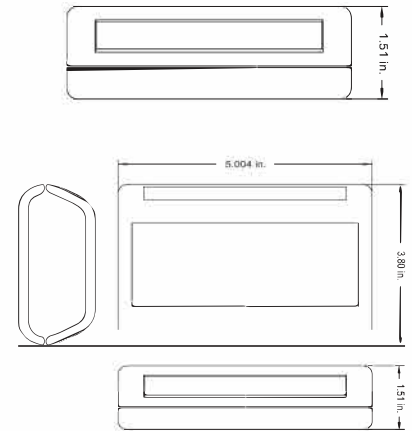
- Wireless range of 2,000+ feet through 18+ walls ¹
- Frequency-Hopping Spread Spectrum (FHSS)
- Best-in-class interference immunity
- Encrypt-RF[®] Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
- 30,000 sensor message memory ²
- Over-the-air (OTA) updates (future-proof)
- 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





ioX XL Ethernet Gateway Specifications

Models

Ethernet GTW-XL-ENET-COM

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 an Internet outage and transferred when the connection is restored.)

Power

Input Power 5.0 VDC @ 1A

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 +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-G2XL1 and IC: 9794A-G2XL1.

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

ioX-Connect commercial-grade 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 ioX XL Ethernet Gateway may experience random reboots and Ethernet link instability in these situations. If so, we recommend using the AC/DC power supply for the device. Additionally, power-line filters or higher-end power inverters may be required for stable operation.



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