

QUAD-BAND FREEDOM IoT GATEWAY



ORDER CODE: GTW-200
PRODUCT CATEGORY: GATEWAYS

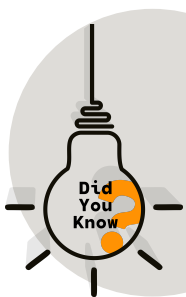
Uninterrupted Connectivity. Anytime, and Anywhere.

PRODUCT OVERVIEW

General Description

E4A's Quad-Band Gateway delivers uninterrupted connectivity across industrial and remote environments such as power utilities, mining, construction, and more. It integrates 900MHz LoRa and 2.4GHz Bluetooth® 5 for reliable edge communication, while Wi-Fi, LTE Cat 1, and Ethernet ensure secure cloud integration.

Designed for versatility, the GTW-200 operates seamlessly in both connected and isolated sites, providing AES-128 encrypted, TCP/IP-secured data transmission for continuous monitoring, control, and data flow between field devices and enterprise systems—ensuring robust, scalable connectivity anytime, anywhere.

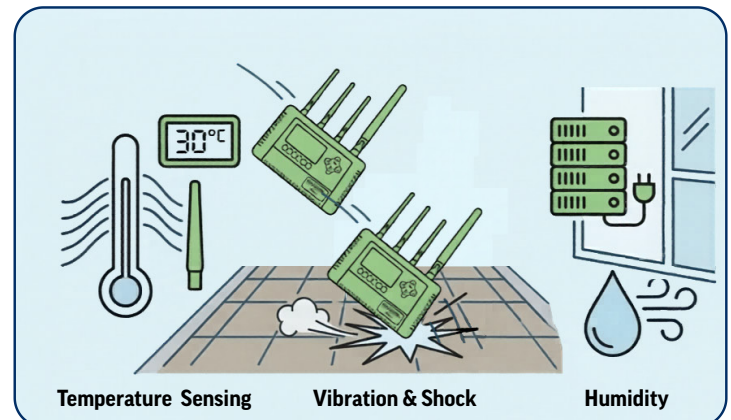


DID YOU KNOW?

This Gateway also monitors:

- ✓ Temperature
- ✓ Vibration & Shock
- ✓ Humidity

to detect environmental changes
or movement.



TECHNICAL SPECIFICATIONS

Power Supply

AC/DC Adapter	12VDC @ 2A (24W)
Power over Ethernet	PoE+, IEEE 802.3at, Mode A and B
USB-C	USB type C/USB 3.0 PD sink, 15W
Typical Power Consumption	2.1W
	Bluetooth, LCD, Ethernet active

Operating Specifications

Operating Temperature	-20°C to +60°C (PoE+ or USB-C) 0°C to +40°C (AC/DC adapter)
Operating and Storage Humidity	20-85% RH
Altitude	2000m
Pollution Degree	2
Ingress Protection	IP30

Measurement Characteristics

Relay Contacts	30VDC @ 2A, 60VDC @ 0.9A
Digital Inputs	IEC 61131-2 Type 1, Type 3 (x2)
Current Input	4mA - 20mA
Analog Input	±10VDC
Resolution	24-bit
Temperature Measurement	20°C to +60°C (±0.5°C accuracy)
Humidity Measurement	20-85% RH (±3.5% accuracy)
Acceleration Measurement	6-axis accelerometer
Ambient Light Detection	16-bit ambient light sensor

Physical Characteristics

Housing Material	Flame Retardant Polycarbonate/ABS
Physical Dimensions	Height: 100mm / 3.9inch Width: 170mm / 6.7inch Depth: 54.5mm / 2.1inch
Weight	550g
Mounting	Universal 35mm DIN rail

Edge Level Communication

Primary Sensor Communication

Transceiver	Bluetooth® 5 integrated transceiver
Frequency Band	2.4GHz
Communication Range	Up to 300m line of sight (Bluetooth® 5)
Data Rate	125kbps (Bluetooth® 5 long-range)
Protocol Type	Proprietary Bluetooth® 5 based
Output Power	Up to ±5dBm with temp. compensation
Receiver Sensitivity	-105dBm
Reporting Interval	User programmable

Range Extender / Repeater

Transceiver	Low power long-range LoRa
Frequency Band	915MHz
Communication Range	Up to 3km
Receiver Sensitivity	Down to -146dBm
TX Power	Up to +18dBm

Cloud Level Communication

Wireless Connectivity	802.11b/g/n Wi-Fi Module LTE Cat 1 2G/3G/4G
Wired Network	Fast Ethernet (10/100)
Telemetry Protocol	MQTT v5.0 over TCP/IP

Security

Encryption	Advanced Encryption Standard (AES) Data Encryption Standard (DES) Secure Hash Algorithm / Message Digest Algorithm (SHA / MD5) Cyclical Redundancy Check (CRC)
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User Interface

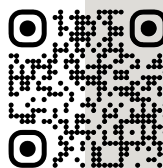
Pushbuttons	6 pushbuttons for gateway function 7 pushbuttons for menu navigation
Status LED	6 status LED's (red, green)
OLED Display	Graphic LCD 2.7", 128x64 resolution



PRODUCT CERTIFICATIONS

FCC ID	2AXVKGTW02
Industry Canada	26661-GTW02
Safety Standards	UL 61010-1 3rd Edition: 2023 UL 61010-2-030: Ed: 2, 2018 CSA C22.2 No. 61010-2-030:18 CSA C22.2 No. 61010-1-12, UPD 1: July 2015; UPD 2: April 2016; UPD 3: June 2023; and AMD 1:2018

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