TECHNICAL DATA SHEET

FIELD CONNECT OUTDOOR GATEWAY

ORDER CODE: GTW-400
PRODUCT CATEGORY: GATEWAYS

Data Intelligence from Wherever the Job Takes You.

PRODUCT OVERVIEW

General Description

E4A's GTW-400 is a rugged dual-band IoT gateway engineered for high-reliability monitoring in demanding outdoor and industrial environments. Its Bluetooth® 5 interface enables efficient local integration with field sensors, while LTE provides secure, long-range connectivity for transmitting data to the cloud for remote visibility and analytics—ensuring continuous insight even when sites are far beyond traditional infrastructure.

Designed for true remote autonomy, GTW-400 supports solar-powered operation, enabling long-term deployments in off-grid and hard-to-reach locations without reliance on external power. With onboard support for RTD probes, analog voltage inputs, 4–20mA current loop transmitters, and industrial digital signals, GTW-400 delivers a unified platform for environmental and industrial data acquisition.

THROUGH ANY SEASON—ALWAYS ONLINE

SNOW

SUN

RAIN

TECHNICAL SPECIFICATIONS

Power	
DC Input	12VDC to 24VDC, 25W maximum
Solar Input	18V panel, 15W maximum
Solar Maximum Power Point	17.6VDC
USB-C Specification	Power delivery 3.2
USB-C Power Profiles (PDO)	5V@3A, 9V@3A, 15V@3A, 20V@3A
Internal Battery Cell	INR21700 × 2 (2S1P), 9800 mAh
Internal Heater	
Power	10W (24VDC, 400mA)
Secondary Protection	Temperature cutout, +85°C ±0.5°C
Typical Performance	-20°C to +5°C, 30 Minutes

Inputs / Outputs	
Digital Inputs	
Input Standard	IEC 61131-2 Type 1, Type 3
Digital Outputs	
Operating Voltage Range	5VDC to 48VDC
Maximum Current	1.6A
Analog Inputs	
Input Range	4-20mA, ±10VDC
Resolution	24-bit
Typical Measurement Accuracy	<±0.5%

Operating Specifications	
Operating Temperature	-20°C to +60°C (normal condition) 0°C to +45°C (battery re-charge)
Storage Temperature	+10°C to +25°C (recommended) -20°C to +25°C (12 months)
Permissible Humidity	20-85% RH (operating and storage)
Pollution Degree	2
Ingress Protection	IP67

User Interface	
Pushbuttons	6 pushbuttons for gateway function 7 pushbuttons for menu navigation
Status LED	5 status LED's (red, green, amber)
OLED Display	Graphic LCD 2.7", 128x64 resolution

Edge Level Communication	
Primary Sensor Communication	
Transceiver	Bluetooth® 5 integrated transceiver
Frequency Band	2.4GHz
Communication Range	Up to 300m line of sight (Bluetooth®)
Data Rate	125kbps (Bluetooth® long-range)
Protocol Type	Proprietary Bluetooth® based
Output Power	Up to ±5dBm with temp. compensation
Receiver Sensitivity	-105dBm
Reporting Interval	User programmable
Range Extender / Repeater	
Transceiver	LTE CAT 1
Supported Bands	LTE-FDD B2, B4, B12
Communication Range	Up to 3km
Max. Power into Antenna	+28dBm/630mW (B12)
Max. Supported Data Rate	10 Mbps DL, 5 Mbps UL
Carrier (Canada)	Rogers/Telus
Carrier (U.S.)	AT&T/T-Mobile/U.S Cellular

Cloud Level Communication	
Wireless Connectivity	LTE Cat 1 2G/3G/4G
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)

Physical Characteristics	
Housing Material	Flame Retardant Polycarbonate/ABS
Physical Dimensions	Height: 170mm / 6.7inch Width: 130mm / 5.1inch Depth: 52mm / 2.1inch
Weight	794g
Mounting	Mounting bracket

PRODUCT CERTIFICATIONS

FCC ID	2AXVKGTW400
Industry Canada	26661-GTW400
Safety Standards	CSA C22.2 No. 61010-1:12; UPD 1:2015; UPD 2:2016; UPD 3:2023; UPD 4:2024; A1:2018 CSA C22.2 No. 61010-2-030:18 UL 61010-1: Ed.3, 2012(R2024) UL 61010-2-030: Ed.2, 2018(R2023)

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CONTACT US

Headquarters
250 Herzberg Road
Kanata, Ontario, Canada K2K 2A1

Lab Testing Facility
1292 Rosedale Road North
Smiths Falls, Ontario, Canada K7A 4S6

Phone: +1 (613) 595-0303
E-mail: sales@electronics4all.ca
Website: www.electronics4all.ca

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