EMU-200 Series

Arm-based Application Ready and Programmable IIoT Gateway

Preliminary

Features

- Python-enabled programmable open platform for customized applications at the edge
- Supported communication protocols include Modus TCP/RTU, MQTT, OPC UA and Restful
- Supports Azure, AWS cloud connection flexible configuration for different user scenarios with wizard
- 2x RS-232/422/485 ports for serial communication with Modbus RTU protocol
- 2x 1 Gb Ethernet ports
- microSD slot for external storage
- Operates in a wide range of temperatures from -40°C up to 70°C
- WiFi and cellular communication (optional)

Introduction

The EMU-200 Series Arm-based IIoT Gateway provides communication between different Ethernet or serial-based protocols allowing for wider integration of devices into a network with the ability to send data to the cloud. The EMU-200 Series is designed to work in a large variety of applications such as renewable energy monitoring and smart manufacturing.

EGiFlow

The EMU-200 Series built-in EGiFlow allows configuration via web browser of serial port, Ethernet, WiFi, cellular, time synchronization and transport I/O data. It also includes a no-code interface for protocol translation and iApp for python-enabled user-defined data analytics at the edge.

Ordering Information

- **EMU-200**
  Built-in EGiFlow allows configuration via web browser

- **EMU-200-W**
  Built-in EGiFlow allows configuration via web browser with WiFi enabled

  Available regions: Europe/Australia and New Zealand/North America/Taiwan

- **EMU-200L**
  Open platform with pre-installed Debian 11

- **EMU-200L-W**
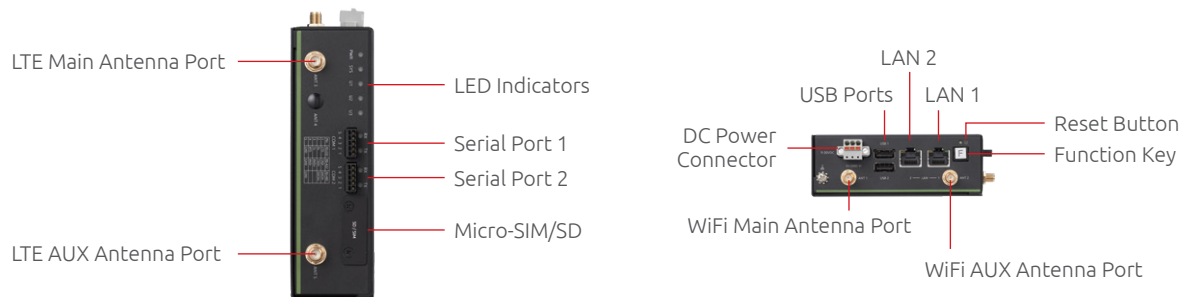 Open platform with pre-installed Debian 11 with WiFi enabled

Optional Accessories

AC-DC ADAPTER 40W
- MEANWELL, GST40A24-AD, Input: 90-264VAC/40W, Output: 24VDC/1.67A

4G LTE
- LTE Sierra EM7411 M.2 4G LTE, Cat 7 for USA and Canada
- LTE Sierra EM7421 M.2 4G LTE, Cat 7 for EU and Taiwan
- Quectel EM05-E M.2 4G LTE, Cat 4 for Europe/Australia/Taiwan
- Quectel EM05-CE M.2 4G LTE, Cat 4 for China
- Quectel EM05-G M.2 4G LTE, Cat 4 for Global

Product Illustration

LTE Main Antenna Port — LED Indicators — Serial Port 1 — Serial Port 2 — Micro-SIM/SD — LTE AUX Antenna Port

LAN 2 — USB Ports — LAN 1 — DC Power Connector — Reset Button — Function Key — WiFi Main Antenna Port — WiFi AUX Antenna Port

Specifications

Model	EMU-200	EMU-200-W
System		
Processor	ARM Cortex A9 1.0 GHz	
Memory	1 GB DDR3	
NAND Flash (eMMC)	32 GB eMMC	
WiFi	N/A	2.4GHz/5GHz
OS	Debian 11	
Configuration Interface	EGiFlow	
I/O Interface		
Ethernet	2x RJ45 10BASE-T/100BASE-TX/1000BASE-T ports	
Serial Ports	2x RS-232/422/485, 300 bps to 115.2 kbps	
USB	2x USB 2.0 Type-A	
Antenna	5 (2x WiFi, 2x LTE, 1x GNSS)	
M.2	1	
Micro-SIM	1	
External Storage		
Storage Slot	1x microSD	
Mechanical		
Dimensions	110.90 (L) x 40 (W) x 131.4 (H) mm	
Mounting	DIN rail kit and wall mount kit	
Housing	Metal, IP40	
Power Supply		
DC Input	9 to 30V	
Environmental		
Operating Temperature	-40°C to 70°C	
Storage Temperature	-40°C to 85°C	
Vibration Resistance	IEC 60068-2-64 compliant Operating: 2 Grms, 5-500 Hz, 3 axes	
Shock Resistance	IEC 60068-2-27 compliant Operating: 20 G, Pulse width: 11 ms duration, 3 times per axis	
Certifications		
EMC	CE/FCC/ICES-003/RCM/BSMI, Class A EN 55032, EN 55035, EN 61000-6-2, EN 61000-6-4, CNS 15936	
Safety	IEC/EN/UL 62368-1	
RF	NA	CE-RED (EN 300328, EN300440, EN 301489 -1/-17, EN301893), RCM, FCC, ISED, NCC