



EDGEHUB

EI-C-FF-BX-I-W/4G

Industrial IOT Gateway

Build edge computing applications in no time!!



Indoor Air Quality Monitoring (IAQ)

- PM2.5
- Temperature
- Humidity
- Co2
- TVOC
- OCC
- Light Sensor

Energy Monitoring (EMS)

- Supports Meter Integration over TCP/458 ports
- User Friendly Dashboards
- Consumption Analysis
- PF, MD alarm limits
- Email Notification
- CSV Consumption

Lightning Control

- Speed
- Energy
- Current
- Control
- Runtime
- Calculations

EC Fan Monitoring (AHU)

- Switch Based Lighting Control
- Status Monitoring
- Remote Operation

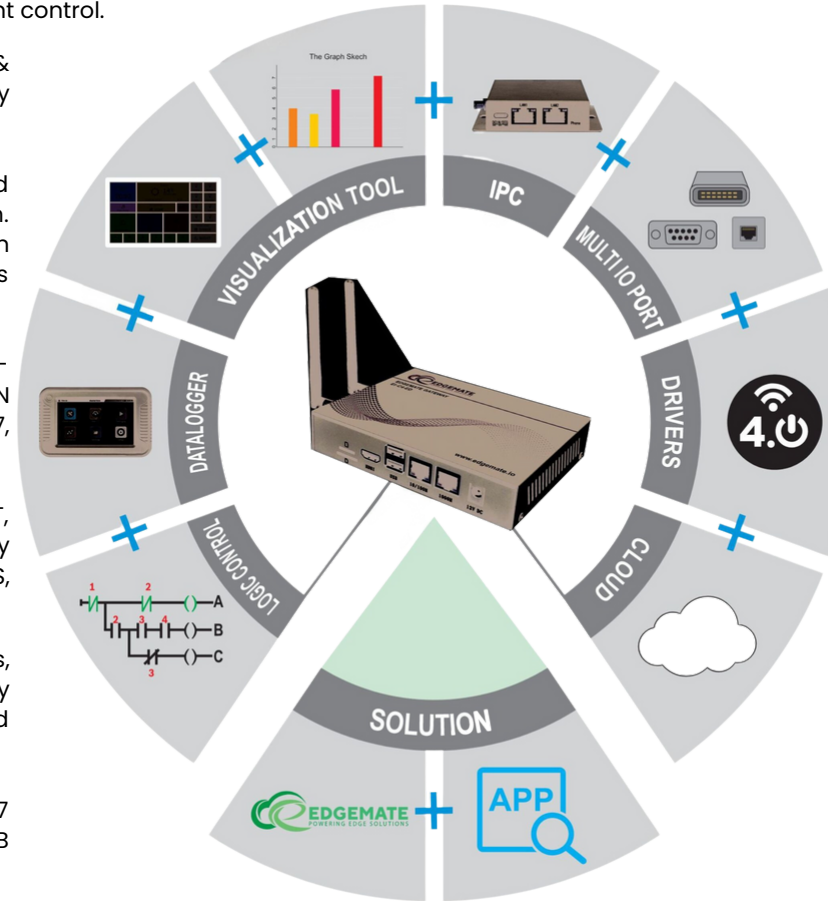
EdgeHUB is an edge computing gateway. It comes preinstalled with the EdgeHub runtime software allowing users to collect, compute, visualize, and build applications closer to the edge of a network, where data is generated or consumed. The Software enables the development of applications in a visual (Drag/drop) code and communicates the edge results to the cloud.

FEATURES

- **Logic Control** – Build PLC-like Logic control.
- **Visualization Tools** – Create visual graphs and custom dashboards for building/managing the application such as event management, task management, device status, and environment control.
- **Data Logger** – Collect data from sensors & devices and store them in a data repository for time series retrieval.
- **Multiple IO Ports** – Includes 4x Isolated RS485/RS232 for industrial data acquisition. Supports daisy chain SPI bus from the main unit for up to 85 different Input outputs (Analog or Digital)
- **Drivers** – Comes Integrated with industry-leading drivers including MODBUS, CAN, CAN OPEN, RS232/485, OPC-UA, Seimens S7, Mitsubishi, Bacnet,
- **Cloud** – Connect and send data via MQTT, REST, HTTP/S, and We socket to third-party cloud services providers such as AWS, Google, and Azure via
- **Remote Device Management** – Access, Manage and Control the Edgehub gateway through Edgeconnect (Edgemate cloud platform).
- **IPC** – Industrial grade hardware with Armv7 Quad-core Cortex-A9 1.4 GHz CPU, 512MB RAM + 8GB eMMC

BENEFITS

- **No or low software development** – Allows organizations to focus on their core competencies. Near plug-and-play experience.
- **Faster Decision making** – Machine-to-machine communication improves efficiency and cost.



- **Enhanced Data privacy** – Mitigates risk associated to data breach and unauthorized access.
- **Optimizes Bandwidth** – Reduce latency, dependency, and cost by sending only relevant data to third-party cloud platforms.
- **Ready, pre-built application suit** – Pick from our suit of preconfigured applications.
- **Remote Access and Monitoring** – Monitor your network, device, and asset performance with bi-directional communication.

SECURITY

- Based on proven and proxy/firewall-friendly WebSocket protocol.
- Can be used without changes to the existing network infrastructure.
- Supports secure, encrypted (TLS), and authenticated connections, secure forwarding of most TCP-based protocols, not just HTTP, including SSH for remote shell and VNC/RDP for remote desktop access.
- Integrated user management and detailed role-and permission-based access control.
- Secure remote access to the cloud is defined by the cloud certificates.

Choose from our selection of ready-to-use applications.

Whether you are an OEM, a system integrator or just starting your IoT journey, EdgeHUB provides simple and secure alternative approach to achieving different IIoT objectives.

Users can choose between building their own applications or pick from our suite of pre-built applications.

Basic Specifications

| | |
|------------|---|
| RAM | Quad-core 64-bit ARM Cortex-A35, frequency 1.3GHz 256M DDR3 (128MB ~ 512MB optional) 4GB eMMC: Supports 4G/8G/16G/32G/64G/128G SPI Flash: Supports 16MB ~512 MB Supports MicroSD (TF) Card Slot expansion |
|------------|---|

Hardware Features

| | |
|------------------|--|
| Ethernet | Dual RJ45 Ethernet ports (100M bps) |
| WiFi | Supports 2.4GHz WiFi, supports 802.11/b/g/n protocol |
| Audio | Built-in CODEC, includes 8-channel ADC, integrated high-performance Codec and Hardware VAD |
| Interface | PSAM × 1 CAN × 1 SIM 4G × 1 RJ45 100M Ethernet port × 2 RS232 × 1 RS485 × 3 DC IN (12V) × 1 Type-C (OTG) × 1 DIN × 1 DOUT × 1 Phone × 1 TF-Card × 1 USB 2.0 × 1 |

OS/Software

| | |
|--------------------------------|--|
| OS | Supports Buildroot (Linux) embedded system, Ubuntu 18.04 |
| Wireless communication | Supports 4G LTE Cat1 wireless communication module, which can realize seamless connection to any operator's 4G network; Supports NB-IOT communication, global frequency band B1/B3/B5/B8/B20/B28 and so on, fast and low-power; Supports industrial-grade long-distance LoRa communication at 868MHz, and the outdoor line-of-sight communication distance is up to 8km, high stability. |
| MQTT Protocol | Supports Modbus standard industrial protocol to MQTT protocol; Supports Alibaba Cloud and other private cloud; Suitable for IoT PLC data acquisition and equipment control. |
| Cryptography Algorithms | The onboard PSAM card slot is convenient for the system to integrate the PSAM card; Has type approval, powerful data encryption and decryption functions – providing excellent-performance DES/3DES, AES, SHA, RSA, ECC, and Chinese commercial cryptography algorithms SM1/SM2/ SM3/SM4 and others. |

General

| | |
|------------------------------|---------------------------|
| Size | 99.4 mm * 84 mm * 35.2 mm |
| Operating Temperature | -10°C~60°C |
| Operating Humidity | 10%~90 % |

Orderable Part Number

| | |
|--------------------|------------------------|
| WiFi Only | EI-C-FF-BX-I-W |
| 4G/LTE Only | EI-C-FF-BX-I-4G |