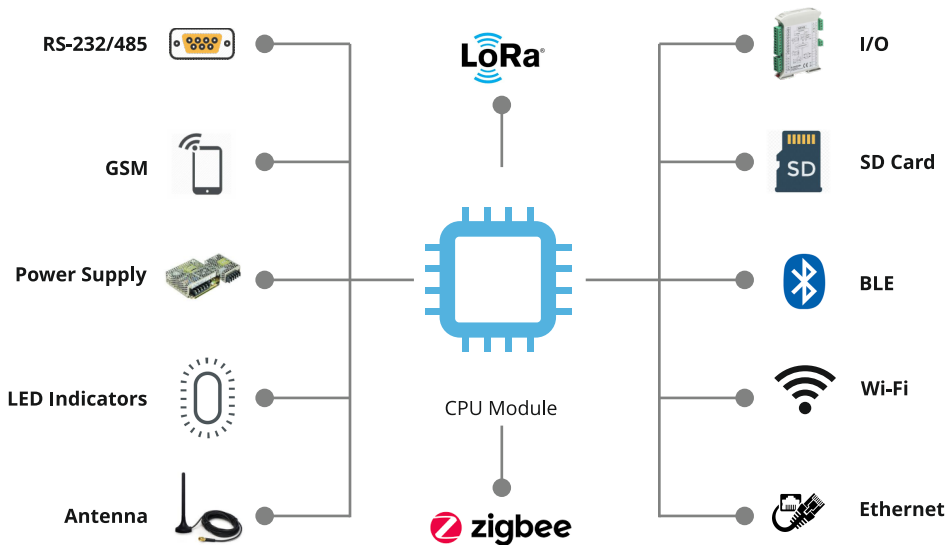


IoT Gateway

Edgelytics IoT Gateway's modular design offers flexibility to support multiple communication interfaces as required. The high level design mentioned below helps explain this point -



Supported in base version

Can be Supported

Supported in High-end version

IoT gateway is an electronic or embedded device that acts as a bridge between on-site devices/equipments like sensors/loggers/programmable controllers and server hosted on-site or in the cloud. The number of interfaces gateway supports typically determines the type and number of on-site devices it can be interfaced with and also its applications and end usage.

- Supports interfaces like BLE, Wi-Fi, Ethernet and Bluetooth. Additionally, interfaces like ZigBee, LORA or any particular interfaces can be provided if required. In general the gateway design is flexible enough to customize it to accommodate client requirements
- Can be connected with data Loggers, energy meters, and programmable logic controllers (PLC) over serial or Ethernet interface using communication protocols like Modbus, BACNet or proprietary protocols (if protocol document is available/provided)
- Can communicate with Analog/Digital Sensor Hubs where individual sensors (temperature, pressure, flow) are aggregated and connected with Gateway over serial bus (SPI) or I2C.
- Offers enough space and computing power to implement Edge Analytics
- Supports MQTT, HTTP (REST) and TCP-IP to communicate with cloud platforms like AWS, Microsoft Azure, GE Predix and others

IoT Gateway



Processor	ARM based
On chip Flash Memory	330 KB
On chip RAM	32 KB
External Serial Flash	120 MB
Firmware Upgrade	Firmware Over The Air (FOTA)
Power	AC Power (110 - 240V, 50 -60 Hz) or 8-36 V DC / AC
Cellular	Quad Band GSM – 850 MHz, 900 MHz, 1800 MHz and 1900 MHz
Operating System	Embedded Real Time OS (RTOS)
Connectors	Power, RS 485 Communication and Antenna
LEDs (Alert Notification)	Communication, GSM network status, Power Status
Server Communication	HTTP, TCP-IP, MQTT
Server Security	SSL
Communication Protocol	CANBUS, MODBUS RTU
Operating Temperature	0 to 70 DegC
Humidity	5% to 90%
Vibration	BS EN 60068 -2-6, 2G for 8-500Hz
Hardware Protection	Over Current Cut Off 1.5 Amp, Watchdog Timer, Reverse Polarity, Load Dump 120 Volts
Switch	Always on
Antenna	GSM Quad Band External Magnetic antenna (3m length)
Enclosure	MS (can be customized as per client needs)
Store and Forward on reconnection	Yes
Ethernet	No (can be provided if client needs it)
Wi-Fi	No (can be provided if client needs it)
External Memory (SD Card)	No (can be provided if client needs it)

Gateway Specifications

(Base Version)

