meazon
measure | monitor | manage

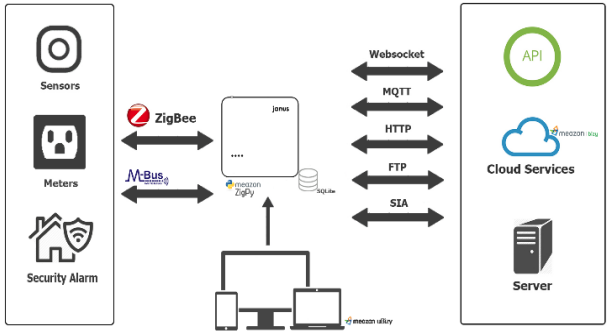
Meazon "Janus" Gateway

Meazon Janus (in ancient Roman religion is the god of beginnings, gates, transitions, time, doorways, passages and endings) is equipped with a powerful Sitara ARM Cortex-A8 at 1GHz and 512MB DDR3. Its storing ability comes at 4GB embedded MMC and works with a state-of-the-art Ubuntu Linux distribution.

Network-time synchronization is available, and even when not, a Battery-Powered Real Time Clock certifies accuracy of measurement/event timestamps. The Gateway is capable of transmitting control and data messages throughout the ZigBee network, which in turn can be monitored using a variety of provided IP-based protocols, such as MQTT, FTP, Websocket or HTTP(s). The monitored data reported by the ZigBee sensors (i.e. measurements, sensor events/alerts), can be stored in a local SQLite database which then can be exported in CSV file format. Janus has a versatile Python platform, developed by Meazon, to connect ZigBee to TCP/IP-like protocols. This service called ZigPy has a modular design which makes it easily extendable. Janus is also designed to facilitate automation of DR (Demand/Response) events using the OpenADR2.0 (Profile A,B) model, whether it involves electric load shedding or load shifting.

A Linux-based, small form factor appliance for provisioning, aggregating and backhauling data from Meazon metering and sensor devices to online analytics services (either Meazon Analytics or an alternative preferred solution) over Ethernet. Thanks to the user-friendly provisioning web application UI, minimal configuration effort is required even for large scale deployments.

Janus provides uBizy, an HTTP User Interface commissioning tool for real-time monitoring. Full control of the ZigBee network is also possible including adding, removing and configuring devices plus capability of configuring Janus's network parameters. The Gateway, supports NodeRed which is a Rule-Based decision making system.



	Feature
Processor	1 GHz ARM Cortex-A8
Memory	512MB DDR3
USB 2.0 ports	2 x USB 2.0 type A host port, mini-USB 2.0 client port
Onboard storage	4 GB embedded MMC, microSD card
Network interfaces	10/100 RJ45, ZigBee, wM-Bus, WiFi (optional), Bluetooth (optional)
ZigBee	Home Automation 1.2
Protocol interfaces	MQTT, HTTP, WebSocket, FTP, openADR 2.0, SIA DC-09, NodeRed, ModBus
OSS applications	ZigPy, uBizy, NodeRed, SNMP
Power source	5.5mm/2.1mm Barrel connector, 5V@2A
Size	118 x 118 x 27 mm
Certifications	CE, FCC
Operating environment	Temperature: -20° C to 50° C Relative Humidity: 10% to 90% (RH), non-condensing