

IoT GATEWAY

REMOTE ASSET MONITORING



The IoT Gateway allows virtually any sensor to be monitored from anywhere with a Cellular connection.

As standard the IoT Gateway accepts inputs from the following:

- Up to 128 IWT Industrial Wireless Transmitters
- 4 off 4-20 mA or 0-10 V analog inputs
- 8 off digital inputs
- 4 off Relay outputs
- Any Modbus enabled instrument over RS-232, RS-485, or Ethernet
- I²C and/or SPI sensors (may need custom software)
- The IoT Gateway uses the MQTT protocol to send this data to remote servers using the built-in 2G/3G or 4G modem.

As Standard, the remote server runs a standard web-based IoT Platform which allows monitoring of the inputs and logged data from any device with an Cellular connection.

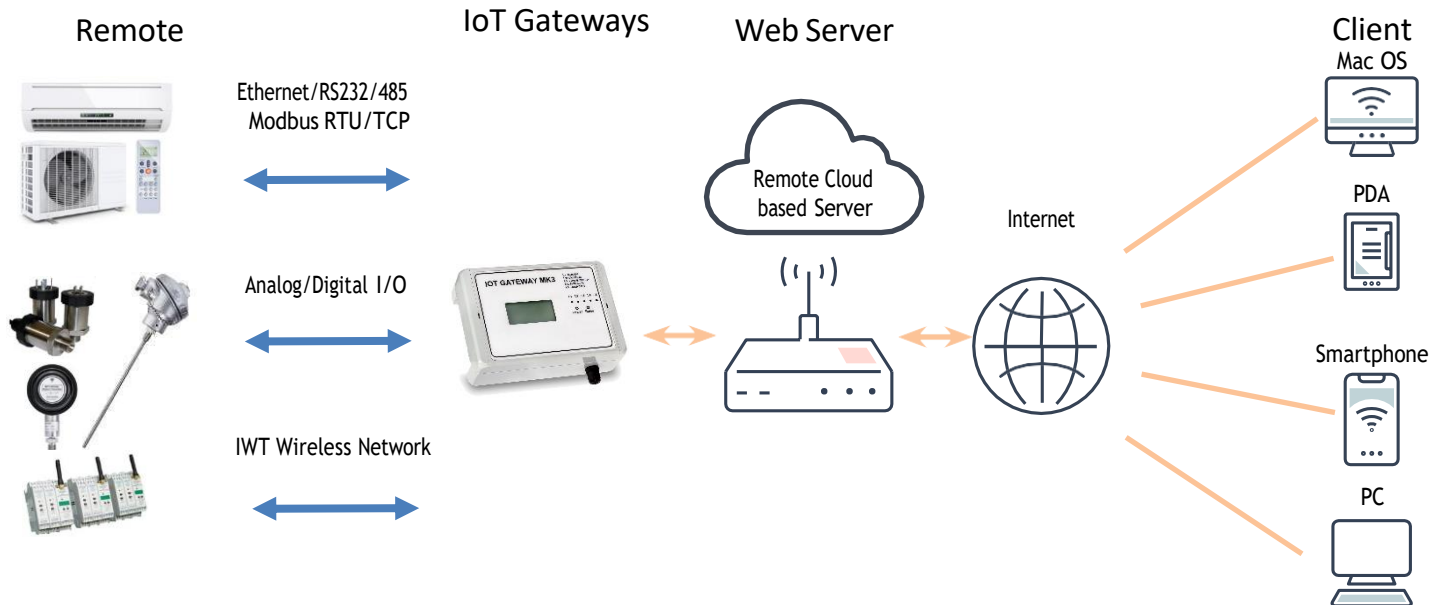
This package can also provide automated custom reports and email or SMS alarm messages.

Other options include a built-in GPS module and a local display showing input values and set-up information.

Features

- Easy, real-time monitoring of remote assets via the internet
- Includes 2G/3G/4G modem and digital communications ports for data acquisition
- Input types include Analog/digital I/O, IWT wireless sensors, and I²C /SPI sensors
- Can be battery or 12-24 V dc powered

A typical application diagram is shown below but the range of possible applications is enormous, please contact sales to discuss your potential application.



TECHNICAL CHARACTERISTICS

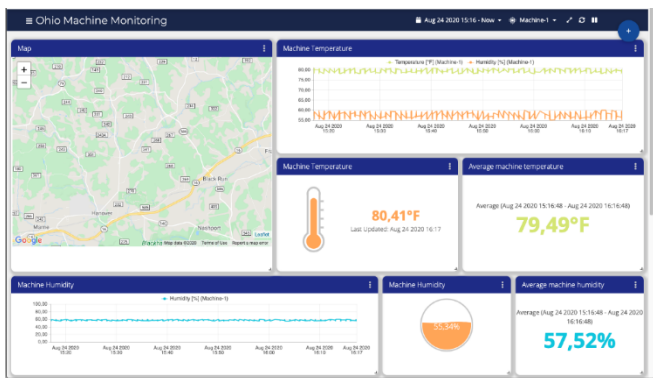
If the full Web Server option is required the data transmitted by the IoT GATEWAY is received by a Firewall protected web server housed in a secure data center. The software has a Username and Password protected interface together with administrator-defined user access levels.

The IoT GATEWAY is configured to update the server with new data at user-programmable intervals. At the same time the IoT GATEWAY can receive any changes in system configuration. Some of the following features are only available if the IoT GATEWAY is specified with a DC power supply, for battery-powered units the IoT GATEWAY must initialize the data transfer.

Other features provided include:

- Activity Reports
- Hours run information
- Automatically generated alarms via SMS Text message or email
- Audit trails
- Tabular real-time and historical data
- Graphic trending of parameters including historical playback.
- Instant view of the live status of all connected equipment. (DC powered only)

A typical data display showing live data and trending is shown below:



Parameter	Min.	Type	Max.	Comments
Supply Voltage	12	12	36	Optional Battery Power from 3.6 V
Transmit Bands	2G	3G	4G	Cat-M1 NB-IOT with 2G fallback
Analogue Inputs				4 off Analogue Inputs
Analogue i/p Res				13 bit resolution accuracy better than 0.1% FS
Digital I/O				8 Digital Inputs and 4 Relay Outputs
Wireless Receiver				Accepts all IWT 2.4GHz Wireless Sensors
GPS Input				Optional built-in GPS module
Input ports				MODBUS RTU or TCP/IP, 2 x I2C or SPI Bus
Display				128 x 64 pixel LCD Local Display
Trans Protocol		MQTT		Custom protocols possible
Dimensions				190 x 125 x 60mm
Weight			190g	
Storage Ambient	-40°C		+85°C	
Operating Ambient	-10°C		+55°C	

DIMENSIONS

All dimensions are in millimeters.

