

## | 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
- I<sup>2</sup>C 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 SCADA project which allows monitoring of the inputs and logged data from any device with an Cellular connection.

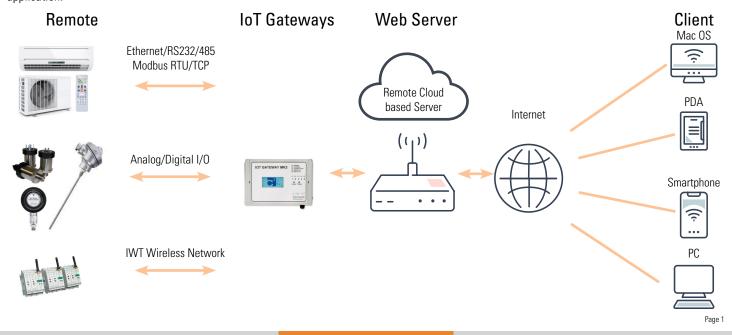
This package can also provide automated custom reports and email or SMS alarm messages.

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 I<sup>2</sup>C /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.







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.	Туре	Max.	Comments
Supply Voltage	12	12	36	Optional Battery Power from 3.6 V
Transmit Bands	2G	3G	4G	GPRS 3G 4G
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				Can accept 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		
Dimensions				190 x 125 x 60mm
Weight			190g	
Storage Ambient	-40°C		+85°C	
Operating Ambient	-10°C		+55°C	

Five Channel Configuration Software\*

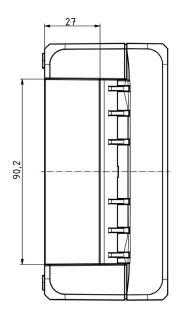
IWT-IWR Configuration Software (free download\*)

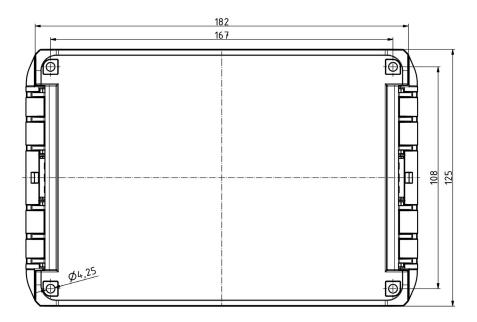
\*Free download user configuration software here





All dimensions are in millimeters.





Made in the UK

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, valuation, and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements, and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at <a href="https://www.sensata.com">www.sensata.com</a> SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY, AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA

## **CONTACT US**

EUROPE +44 (0)1202 897969 c3w\_sales@sensata.com Cynergy3 Components Ltd. 7 Cobham Road, Ferndown Industrial Estate, Wimborne, Dorset, BH21 7PE, United Kingdom

USA +1 310 561 8092 / +1 866 258 5057 c3w\_sales@sensata.com