

**Technical Overview** 



The Monnit Serial MODBUS Gateway (SMG) acts as a data concentrator for Monnit wireless sensor networks. This device allows you to connect up to 100 wireless sensing devices, per gateway, to your existing serial MODBUS RS-232C and RS-485 sensing and control infrastructures.

Monnit has recognized the importance of using open standards like MODBUS, allowing Monnit wireless sensors to be used in the majority of industrial applications. Modbus is often used to connect a supervisory computer with a remote terminal unit (RTU) in supervisory control and data acquisition (SCADA) systems. Modbus allows for communication between many (approximately 247) devices connected to the same wired network. Therefore, Monnit SMG's allows for seemingly unlimited wireless expansion of a traditional wired network.

A system incorporating a Monnit SMG would consists of the the following:

- MODBUS Master PLC, SCADA, etc.
- Existing RS-232C or RS-485 Infrastructure.
- Monnit Serial MODBUS Gateway (SMG).
- Monnit Wireless Sensors

## **Applications**

- Process automation protocols
- Industrial control system protocols
- Building automation protocols
- Power system automation protocols
- Automatic meter reading protocols
- Automobile / Vehicle protocol buses
- In any existing MODBUS system

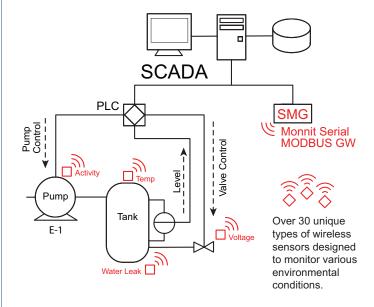


## **Features**

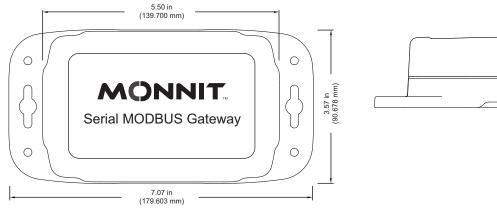
- Works with Monnit 900, 868 and 433MHz Sensor Networking Solutions
- Communicates with MODBUS RTU / ASCII Serial Protocols
- Supports RS-232C / RS-485 Interfacing
- Power Indicator LED Indicator???
- NEMA 4X / IP66 Rated Enclosure
- RP SMA Antenna Connector (Antenna Included)

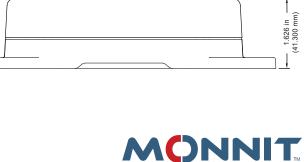
## **Example Network Integration**

Monnit wireless sensors integrate with existing MODBUS systems allowing for additional environmental variables to be monitored.



Monnit Serial MODBUS Gateway Specifications	
General	
Monnit APN Interface Support	RFSC1 Module by Monnit Frequencies: 433, 868 and 900 MHz (Future support for WiFi and 500 mW modules)
Antenna	Connector: SMA Gain: 5.0 dBi Standard
3 Wire Communication Interface	
RS-232C	TXD (OUT), RXD (IN), and Ground / Common
RS-485	D+, D-, and Ground / Common
Protocol Selector	Jumper for RS-232 and RS485
Power	
Input Voltage Range	5.5 - 36.0 VDC
Minimum Current Required	100mA (500mA Recommended)
Mechanical	
Reset Feature	Communication / Factory Settings Reset Jumper
Enclosure	UV Stabilized Polycarbonate (NEMA 4X, IP66 Rated)
Dimensions	179.603 x 90.678 x 41.30 mm
Weight	16 ounces
Environmental	
Operating Temperature	-40 to +85 °C (-40 to +185 °F)
Storage Temperature	-40 to +85 °C (-40 to +185 °F)





For more information about our products or to place an order, please contact our sales department at 801-561-5555.

Visit us on the web at www.monnit.com.

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