

Introduction

SST Automation's GT100-MQ-RS Industrial IoT Gateway provides seamless connectivity between Modbus RTU/ASCII devices and the Industrial Internet of Things (IIoT). It connects a Modbus Master or up to 31 Modbus Slave devices to an MQTT Broker for IIoT applications such as cloud dashboards, remote data logging, and mobile monitoring apps.

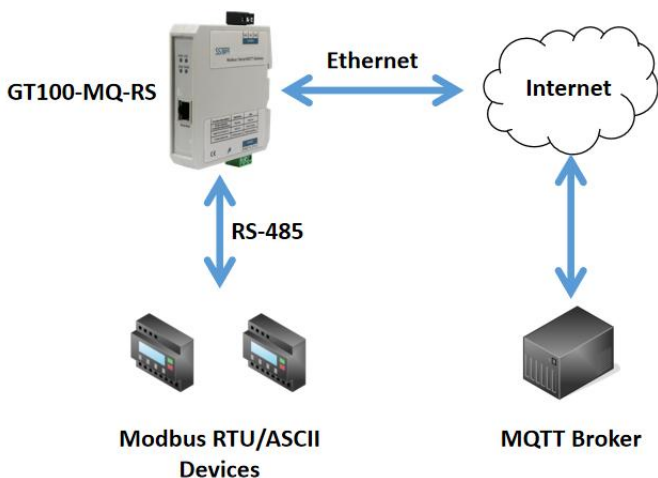
Features and Benefits

- Seamlessly integrate industrial equipment with cloud-based IoT platforms
- Connect up to **31 Modbus RTU/ASCII Slaves or one Modbus RTU/ASCII Master**
- Configurable Ethernet port for LAN/WAN wired connections to MQTT networks
- Supports MQTT version 3.1.1
- Enhanced security with TLS v1.2 encryption
- Customizable JSON data format for flexible integration
- Simplified troubleshooting with built-in Modbus and MQTT debugging tools
- Timestamp function for accurate data logging and synchronization
- Supports up to 1000 MQTT data point tags
- Built-in watchdog timer with automatic reset
- Backed by a **3-year hardware warranty**



Typical Use Case

The GT100-MQ-RS gateway connects Modbus RTU/ASCII serial devices to an MQTT broker, serving as a communication bridge between Modbus networks and MQTT-based cloud platforms. It enables seamless data exchange and integration between field devices and IoT applications.



Compatible Systems:

- **MQTT Servers:** Microsoft Azure, Amazon AWS, and generic brokers
- **Modbus Serial Devices:** Sensors, Instruments, PLCs

Technical Specifications

Modbus Features	
Operation Mode	Modbus RTU Master, Modbus RTU Server, Modbus ASCII Master, & Modbus ASCII Server
Serial Standard	RS-485
Galvanic Isolation	1kV photoelectric isolation
Baudrate	600 bps to 115.2 Kbps
Maximum Modbus RTU/ASCII Slave Devices	31
Maximum Modbus RTU/ASCII Master Devices	1
Maximum Number of Commands	100 (As Modbus Master)
MQTT Features	
Protocol	MQTT Version 3.1.1
Max Broker Connections	1
Maximum Number of MQTT Data Tags	Up to 1000 Data Tags
Security	TLS V1.2 Ecrption
Supported Data Formats	JSON
Maximum Number of MQTT Topics	Up to 25 Topics
Electrical / Environmental	
DC Input Voltage	24 VDC (Range 11V to 30 V)
Operating Temperature	-4°F to 140°F (-20°C to 60°C); Humidity 5% to 95%
Relative Humidity	5% to 95% RH (non-condensing)
Certification	CE Compliant to EMC Test Standards
Physical	
Dimensions (W x H x D)	1.0 x 4.0 x 3.6 in 25 x 100 x 90 mm
Mounting	35mm DIN Rail
Ethernet Port	(1) 10/100 Base-T, RJ45 Connector
Serial Port	(1) 3-Pin Terminal Block
Power Interface	(1) 3-Pin Terminal Block

Dimensions

Unit: mm (inch)

