

# TSRS485 Reader-GSM2

## Datasheet

The **TSRS485 Reader- GSM** is Reliable, Flexible and Plug-n-play device to read data over RS485 (Modbus RTU) from any device and transmit that data securely to other devices over GPRS Network using various IoT protocols (MQTT). Modbus RTU and MQTT protocol handling are integrated into GPRS module for better reliability. This enables this device to use powerful CPU and more memory resources to make Module's software architecture flexible and robust. Most innovative and unique design on SIMCOM GSM/GPRS without using any external microcontroller.

For additional information, updated documentation, and a list of accessories, contact us at [support@thingslista.com](mailto:support@thingslista.com).



## Specifications

### GSM/GPRS Modem

- SIM800 2G Quad band
- 2G Quad-band 850/900/1800/1900MHz
- GPRS multi-slot class 12/10
- GPRS mobile station class B
- GSM phase 2/2+ Class 4 (2 W @ 850/900MHz) Class 1 (1 W @ 1800/1900MHz) compliant

### Power Requirements

- 9-24VDC/2A

## Accessories

Modbus RTU MQTT Gateway  
12V/2A Power Adapter  
GSM 2 DBI rubber duck antenna

## Features

1. Flexible firmware design and architecture
2. Easy to change firmware logic as per client requirement
3. Supports parallel RS485 (Modbus Read/Write RTU) transactions
4. Designed around SIMCOM SIM800 GSM/GPRS Module.
5. Standard JSON payload output
6. Supports up to 800 tags (Modbus registers) in total (Multiple transactions)
7. Supports up to 40 tags (Modbus registers) per transaction(Max Transaction 20)
8. Configurable data transmission interval
9. Limited data buffering on board to avoid data loss during failover
10. Extensible data buffering using micro SD card for larger data buffering capabilities
11. Robust failover handling.
  - a. Auto reconnect with endpoint.
  - b. Auto reboot if required (no signal or connection fails repeatedly).
12. Externalized configuration parameters
  - a. MQTT Broker URL/IP, Port no, Username & Password,
  - b. RS485 Baud rate for serial port (2400, 4800, 9600, 19200, 38400, 57600, 115200)
13. Secure data transmission over SSL/TLS

## Warranty

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