

# TSRS485 Reader-GSM4

# Datasheet

The **TSRS485 Reader- GSM4** 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 4G/LTE 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 Quectel EC25-E without using any external microcontroller.

For additional information, updated documentation, and a list of accessories, contact us at support@thingslista.com.



## Specifications

## 4G/LTE Modem

- Quectel EC25-E Processor
- LTE, UMTS/HSPA (+) and GSM/GPRS/EDGE
- Bandwidth:1.4/3/5/10/15/20MHz
- Frequency: FDD LTE: B1/B3/B5/B7/B8/B20 TDD LTE: B38/B40/B41 WCDMA: B1/B5/B8 GSM: 900/1800
- Multi-constellation GNSS(Global Navigation Satellite System) receiver
- Recommended operating temperature range: -40 °C ~ +85 °C
- Antenna DL MIMO, supports Rx-diversity

## **Power Requirements**

• 9-24VDC/2A



### Accessories

- Modbus RTU MQTT Gateway
- 12V/2A Power Adapter
- GSM 2 DBI rubber duck antenna
- GPS/GLONASS GNSS Antenna With 3 Mtr Cable

#### **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 Quectel EC25 is a series of LTE Cat 4 module
- 5. 150Mbps downlink and 50Mbps uplink data rates
- 6. GNSS receiver available for applications requiring fast and accurate GPS Positioning in any environment
- 7. Standard JSON payload output
- 8. Supports up to 800 tags (Modbus registers) in total (Multiple transactions)
- 9. Supports up to 40 tags (Modbus registers) per transaction (Max Transaction 20)
- 10. Configurable data transmission interval
- 11. Limited data buffering on board to avoid data loss during failover
- 12. Extensible data buffering using micro SD card for larger data buffering capabilities
- 13. Robust failover handling.
  - a. Auto reconnect with endpoint.
  - b. Auto reboot if required (no signal or connection fails repeatedly).
- 14. 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
- 15. Secure data transmission over SSL/TLS

## Warranty

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