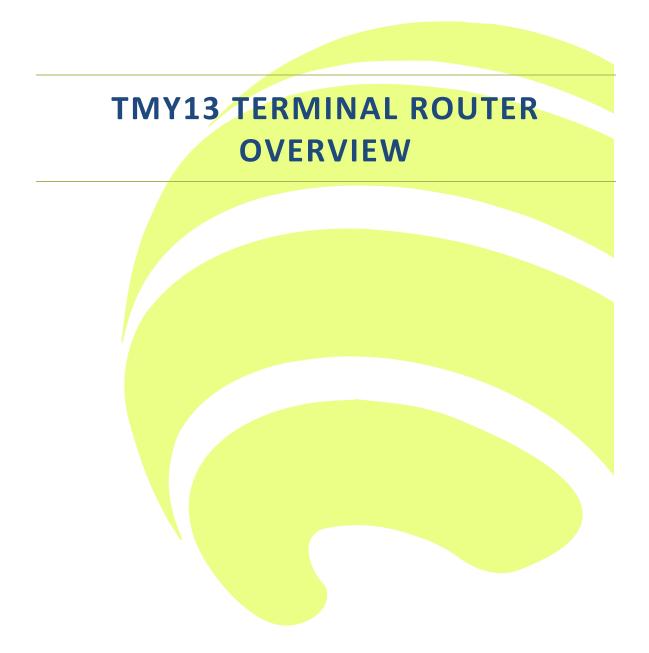


ThingsMatrix: TMX-200225





## **TMY13 Product Overview**

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#### **TMY13 Product Overview**

#### 1. Introduction

This guide provides the user with an overview of the features available on the TMY13 device.

The Industrial Internet of Things has entered a new era of rapid development, and the availability of dedicated communications equipment has become more and more important.

Based on the requirements for intelligent and remote operation and maintenance and taking into consideration the continuous demand for operating costs reduction, 4G wireless cellular communications has gradually become the mainstream communications technology of the Industrial Internet of Things.

Diverse smart equipment exchanges information through the wireless communication networks. TMY13 is the industrial grade terminal router of choice that is used for data communications of machinery and equipment across several industries.

### 2. Product Brief

### 2.1 Features

#### 2.1.1 Communication Interfaces

- 2 100BaseT Ethernet ports
  - o One LAN port can be configured as a WAN port
- 1 RS-485 industrial bus communications interface
- 1 RS-232 serial port communications interface (for debugging)
- 1 USB2.0 communications interface (host)

#### **2.1.2** Power

9~40VDC wide voltage input range.

### 2.1.3 Operating Environment

Industrial-grade hardware design with a watchdog to ensure smooth operation of the firmware.



## 2.2 Applications

Wireless data communications between machine equipment (DTU) and a remote server.

### 2.3 Components

Terminal host and LTE antenna.

### 2.4 Functions

#### 2.4.1 Data Transmission

The data exchange between the equipment and the service main control station through the 4G public network.

### 2.4.2 Gateway Functions

Support TCP/IP and other Ethernet protocols, support RS-232/RS-485 communications standards.

### 2.4.3 Remote Management

The terminal has remote maintenance functionality, and commands can be sent to the terminal through the control center to perform configuration and parameter setting, remote firmware upgrade, and remote retrieval of logs.

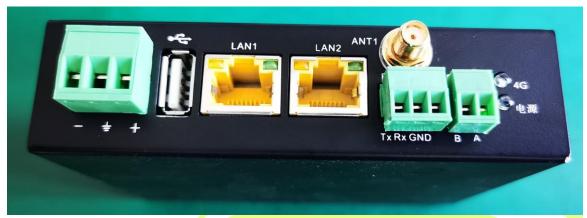
### 2.4.4 Data Compensation

The terminal automatically stores data when the wireless network is not available, and it can resume reporting this data once the communication is restored.

# 3 Technical Specifications













Category	Feature	Description
General	Product Name	4G Terminal Router
	Product model	TMY13
Performance	Module	Quectel EC25
		FDD-LTE, Cat4
	Cellular Network	WCDMA
		GSM
	Frequency bands	EU: EC25-EU Mini PCle
		LTE-FDD: B1/B3/B7/B8/B20/B28A
		LTE-TDD: B38/B40/B41
		WCDMA: B1/B8
		GSM/EDGE: B3/B8
		NA: EC25-AFX Mini PCle
		LTE-FDD: B2/B4/B5/B12/B13/B14/B66/B71
		WCDMA: B2/B4/B5
	Antenna type	External omnidirectional single antenna, 2.5dBi gain
		1*RS-232
		1*RS-485
	External interface	1*USB2.0
		10/100BaseT Ethernet: 1*LAN
		1*LAN/WAN (configurable)
	Input power	9~36VDC
Environmental	Working Temperature	-30℃~70℃
	Storage Temperature	-40°C~+85°C
	Humidity	95%RH
	IP Rating	IP40
Reliability	Battery life	5 years
	MTBF	50000 hours
	EMC	GB/T 17626 Level 4