

Model: UT-6804MT-GW

(Product Name: Modbus Gateway)

Datasheet



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1. Overview

UT-6804MT-GW product provides Modbus gateway functionality, which can convert data from multiple cascaded Modbus RTU Slaves into Modbus TCP messages and support multiple Modbus TCP Master access controls. It can also convert data from multiple Modbus TCP Slaves into Modbus RTU messages and support multiple Modbus RTU Master access controls.

2. Major Functions & Features

- The device features a metal casing and is designed with various installation methods, making it suitable for industrial control applications.
- The wide power input range (12~48VDC) makes it compatible with different power supplies in the field.
- It provides 4 RS485/RS422 ports to meet the needs of multiple serial port applications.
- The device supports a wide baud rate range of 300-921600bps, making it applicable for communication between different devices.
- It supports various operating modes, such as ModbusRTU Master/Slave and ModbusTCP Master/Slave.
- The device can be upgraded with Web firmware, making it convenient for special applications in different scenarios.

3. Technical Parameters

Model	UT-6804MT-GW
Processor	32bit 400MHZ
Memory	128M
Ethernet interface	10/100M (embedded with 1.5KV electromagnetic isolation) adaptive MDI/MDI-X Ethernet interface, RJ45 interface
Serial port	RS-485, RS-422
Port	4x4 Pin 3.81mm Terminal Block
Indicator light	Power indicator light PWR, operation indicator light RUN
Power interface	The device can be powered by either a DC-005 socket or a 3Pin 5.08 terminal block. It is built with reverse connection protection to prevent damage caused by connecting the positive and negative poles incorrectly.
Power supply range	DC12~48V
Function button	One factory reset button RESET
Maximum power consumption	2W
Casing	Metal casing, protection level IP30
Operating environment	Storage temperature: -40~85° C Operating temperature: -40~85° C

	Relative humidity: 5%~95% (non-condensing)
Dimensions L × W × H	161mm x 91mm x 37mm (excluding mounting components)
Net weight	Weight: 350g

4. Software Parameters

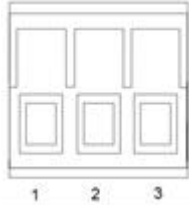
System	Based on Linux
Protocol support	ARP、IP、ICMP、UDP、TCP、HTTP、DHCP、MODBUS
Configuration method	Web browser
Operating mode	ModbusRTU Master/Slave, ModbusTCP Master/Slave
Baud rate	300-921600bps
Data bits	5、6、7、8
Stop bits	1、2
Parity check	None、Odd、Even
Flow control	RTS/CTS、DTR/DSR、XON/XOFF (only RS-232)

5. Certification standards

EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC61000-4-2 ESD: Contact 4kV, Air 8kV IEC61000-4-3 RS: 80MHz-1GHz 3V/m IEC61000-4-4 EFT: Power 1kV, Signal 0.5kV IEC61000-4-5 Surge: Power differential mode 1KV, common mode 2KV (1.2/50 us) Ethernet port differential mode 1KV, common mode 2KV (10/700 us) RS-232/485/422 differential mode 0.5KV, common mode 1KV (10/700 us) IEC61000-4-6 CS: 150KHz-80MHz 3V/m

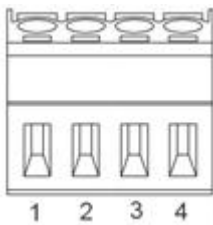
6. Interface definitions

1. Power interface terminal definition



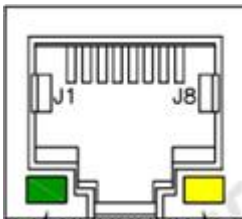
5.08 Terminal Block Power Interface	Power Interface
1	Power Positive Pole V+
2	Connect to Ground (PGND)
3	Power Negative Pole V-

2. Definition of Serial Port Terminal Pins



3.81 Terminal	RS-485	RS-422	Explanation
1	T/R+	TX+	Transmit/Receive Positive
2	T/R-	TX-	Transmit/Receive Negative
3		RX+	Receive Positive
4		RX-	Receive Negative

3. Definition of Ethernet RJ45 Interface



The green light indicates 'link' and the yellow light indicates 'ACT'

The pin definitions for 100Base-T are shown in the following table

Pin number	MDI Signal	MDI-X Signal
1	BI_DA+/TX+	BI_DB+/RX+
2	BI_DA-/TX-	BI_DB-/RX-
3	BI_DB+/RX+	BI_DA+/TX+
4	-	-
5	-	-
6	BI_DB-/RX-	BI_DA-/TX-
7	-	-
8	-	-

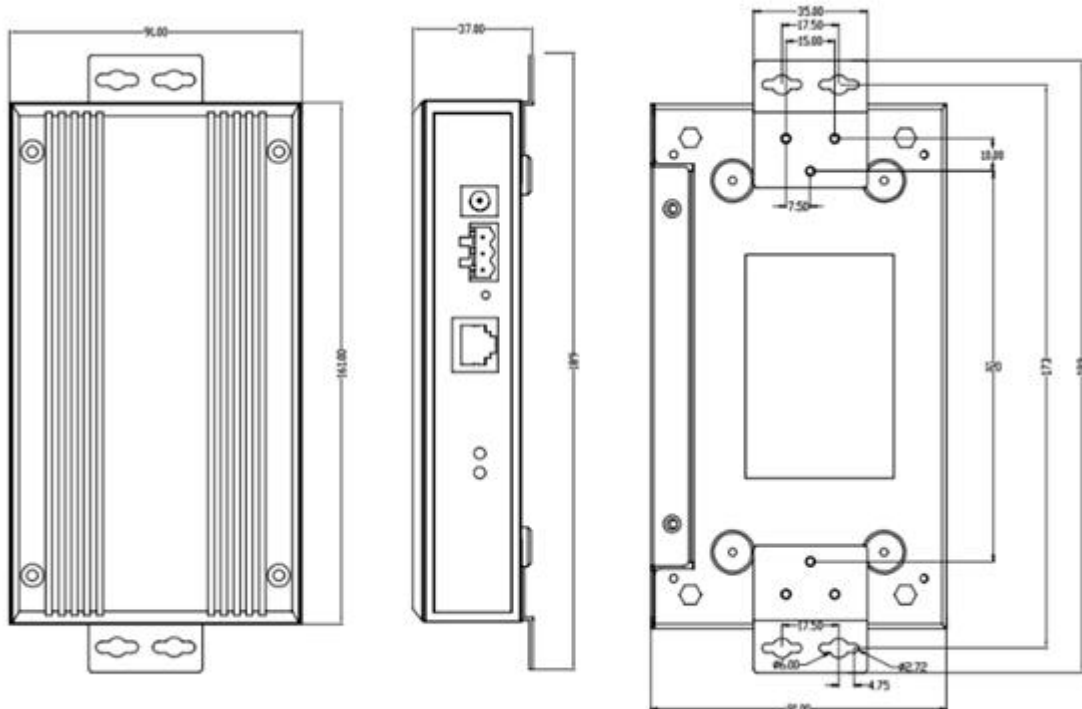
Note: "TX±" denotes transmit data ±, "RX±" denotes receive data ±, and "-" indicates unused

6. Appearance



7. Structure dimensions

- Physical dimensions: Length 161±0.5mm, Width 91±0.5mm, Height 37mm±0.5mm



10. Accessories

Name	QTY(unit)
UT-6804MT-GW Device	1PCS
Certificate of Conformity	1PCS
Warranty Card	1PCS
Fixing Plate	2PCS