

# RS-485/232/422 TO ETHERNET - Modbus Gateway

UT-504

## RS-485/232/422 TO ETHERNET - Modbus Gateway

- Support 3-in-1 RS-232/RS-485/RS-422 serial interface .
- Support 10/100M with 300bps-115.2Kbps.
- Support TCP, UDP, ARP, ICMP, HTTP and DHCP.
- Protocol support standard TCP/IP SOCKET/Modbus Ethernet Protocol Gateway.
- Support virtual serial driver access and auto connection.
- Support windows network and serial interface configuration mode.
- Low consumption design with DIN-Rail or Wall Mounting installation.



## INTRODUCTION

GW1101 series of Modbus gateway are designed for integrating Modbus RTU/ASCII and Modbus TCP; they can achieve the conversion between Modbus RTU/ASCII and Modbus TCP protocol. This series provide 2 types of products and support 1 RS-232 or RS-485/422 and 1 100M Ethernet copper port. They adopt wall mounting to meet the requirements of different application scenes.

Modbus gateway supports multiple network protocols, such as Modbus, TCP, IP, UDP, TELNET, ARP, ICMP, HTTP, DNS and DHCP protocols. It possesses complete management function, and supports access control, rapid configuration, online upgrading, etc. RTU Master, RTU Slave, ASCII Master, ASCII Slave and other operating modes are supported; it supports up to 32 TCP Slave requests under Master mode and 16 TCP Master connections under Slave mode. TELNET, WEB and other access modes are also supported. It can provide you with good user experience via friendly design of network management system interface, simple and convenient operation.

DIP switch can achieve the device restore factory defaults. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in PLC control and management, Building Automation System, Health Care Automation System, measuring instrument and environmental forces monitoring system.





## FEATURES AND BENEFITS

- Adopt 32 bits ARM processor
- Support 10/100Base-T(X) self-adaptive Ethernet interface
- Support AUTO MDI/MDIX, which can be connected via crossover cable and straight-through cable
- Support 300bps-115200bps line speed and non-blocking communication
- Support low power consumption mode and high performance mode
- Support TCP Server, TCP Client, TCP Auto, UDP, Advanced TCP Server and Advanced UDP operating mode
- Support AT command, which is convenient for the secondary development of users
- Support DNS, which can achieve communication via domain name
- Support across gateway and routing communication
- Support virtual serial port drive access mode and automatic connection recovery after network interruption
- Flexible serial port data framing setting, which can satisfy user's various demands for data packets segmentation
- Support standard TCP/IP SOCKET application access
- TCP supports multi-connection, which allows maximum 4 users to monitor or manage the serial device simultaneously
- UDP supports single machine or multi-machine communication, which allows multiple users to monitor or manage the serial device simultaneously
- Support Windows configuration tool, serial port, WEB and other configuration forms
- Support local and remote system firmware upgrading





TECHNICAL SPECIFICATION  
**SPECIFICATION**

Ethernet Port	Standard: 10Base-T, 100Base-TX Protocol: TCP, UDP, ARP, HTTP, ICMP, DHCP, DNS Rate: 10/100M automatic flow control, MDI/MDI-X autotuning Interface quantity: 1 Interface form: RJ45 Duplex mode: full/half duplex mode self-adaption Operating mode: 4 sessions, support TCP Server, TCP Client, UDP, TCP Auto, Advanced TCP Server and Advanced UDP
Serial Port	Standard: EIA RS-232C, RS-485, RS-422 Quantity of serial port: 1 RS-232 or RS-485/422 serial port RS-232 signal: RXD, TXD, DTR, GND, DSR, RTS, CTS RS-485 signal: D+, D-, GND RS-422 signal: T+, T-, GND, R+, R- Baud rate: 300-115200bps Data bit: 5bit, 6bit, 7bit, 8bit Parity bit: None, Even, Odd, Space, Mark Stop bit: 1bit, 1.5bit, 2bit Interface form: RS-232, adopt DB9 mal RS-485/422, adopt 5 pins 5.08mm pitch terminal blocks Directional control: RS-485 direction adopts data flow automatic control technology Load capacity: RS-485/422 end supports 32 points polling (customizable 128 points) Pull high/low resistor for RS-485: 4.7kΩ
Configuration	WEB configuration management, serial port AT command, Windows configuration tool
Security	Classification of User Permissions
Indicator	Power supply indicator, Ethernet port indicator, serial port indicator
Power Requirement	9~48VDC, 3 pins 5.08mm pitch terminal blocks Support reverse polarity protection
Power Consumption	No-load: 0.80W@12VDC Full-load: 0.84W@12VDC
Environmental Limit	Operating temperature range: -40~75*c Storage temperature range: -40~85*c Relative humidity: 5%~95% ( <b>no condensation</b> )
Physical Characteristic	Housing: IP40 protection, metal Installation: wall mounting Dimension (W x H x D): 69mm×22mm×100mm Weight: 240g
Industrial Standard	EC 61000-4-2 (ESD, Electro-static Discharge) , Level 3 ➤Air discharge: 8kV ➤Contact discharge: 6kV IEC 61000-4-4 (EFT/B, Electrical Fast Transient/Burst), Level 3 ➤Power supply: 2kV ➤Ethernet interface: 1kV ➤Serial port: 1kV IEC 61000-4-5 (Surge), Level 2 ➤Power supply: common mode 2kV, differential mode 1kV ➤Ethernet interface: 2kV ➤Serial port: common mode 1kV, differential mode 1kV Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6
Certification	CE

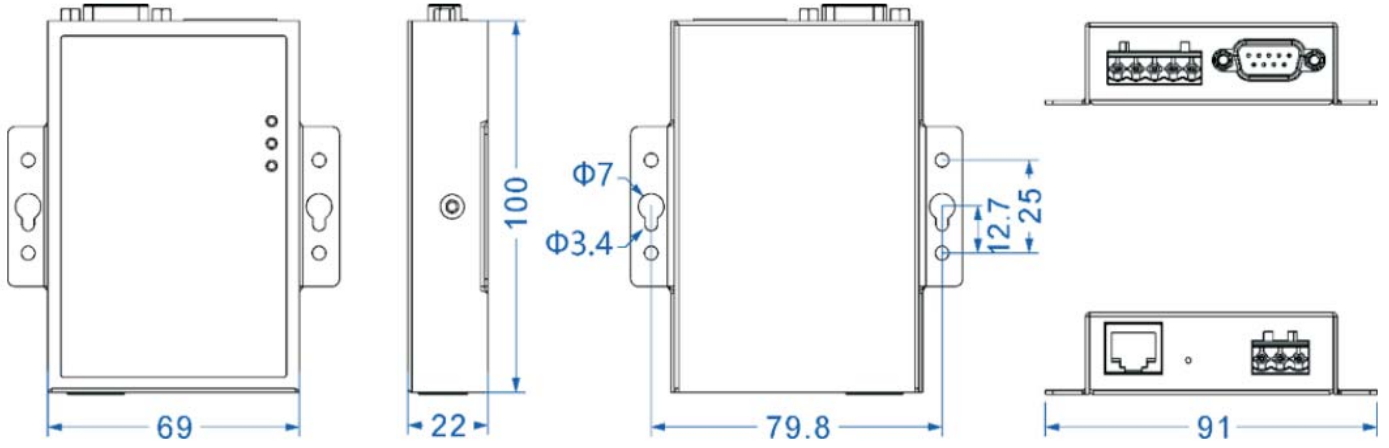




CE

### DIMENSION

Unit:mm





## PROCESS INDICATOR & CONTROLLERS



PID CONTROLLERS

ON/OFF INDICATOR & CONTROLLERS

LOOP POWERED INDI.

2" LARGE DISPLAY

4" LARGE DISPLAY

8" / 12" LARGE DISPLAY

## Data Loggers and Scanners



32 channel Universal Data Logger

8/16 ch. Universal Data Logger

12 ch. Indicator

Analog to 485 Module

4 ch. indicator

8 ch. indicator

## COMMUNICATION CONVERTORS



422/485 Signal Repeater

Ethernet To 232/485 Iso. converter.

USB To 232/485 converter.

USB-422/485/232 Converter

232 To 422/485 Iso. converter.

232 to 485 converter.

## FLOW INDICATOR CUM TOTALIZER & CONTR.



Water Flow Meter

Flow Meter Electro Magnetic

Gas/Air Flow Meter

Water Flow Meter

Helical Flow Meter

Oval Gear flow Meter-Oil/ fuel

## Other Product



Alarm Annunciators

pH Indi. & Sensor

Digital Pressure Gauge

Manual Loader

Vibrations X'Mer

Digital Temp. Gauge

Pressure X'Mer

Flip Large Indicator

## SIGNAL ISOLATOR & TRANSMITTERS



Signal Isolator-4 ch. output

Signal Isolator-up to 1 & 2 ch. output

Uni. Temp. Transmitter

Signal Isolator-2 ch. output

Uni. Temp. Transmitter

Power Transducer

## FLAME PROOF INDICATOR AND PANELS



Flame proof Indi. Contr.

4 ch. Indicator Flame proof

FLP T + RH + DP Indi.

FLP Process Controller

FLP Temp. Transmitter

FLP alarm Annunciator

FLP Indi.

8 ch. Indicator Flame proof

## PROCESS INDICATOR & CONTROLLERS



Flow Indicator Totalizer

Flow Indicator Totalizer

LED Display- FIT

Batch controller & Totalizer

Mass Flow Totalizer (Steam/ GAS)

Loop Powered Totalizer

## CLEAN ROOM INSTRUMENTS- PHARMA



Temp. + Humidity + Dp and Time indicator

DP Transmitter & Indi.

Portable Indicator T RH DP

T RH DP TIME - TOUCH SCREEN

Temp. + RH Transmitter

Master Slave clock

Wired and Wireless