

8 Port Isolated RS232/485/422 Modbus TCP Gateway, Model SC10E08M I U TD

Introduction



SC10E08M I is Isolated Modbus gateway designed for integrating Modbus RTU/ASCII and Modbus TCP networks. It supports wall mounting or desktop mounting to meet the requirements of different application scenes.

Hardware is fanless with low power consumption, wide temperature and voltage support. It 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, etc.

Features and Benefits

- ✓ 2*10/100Base-T(X) Ethernet interfaces and provide dual IP and MAC addresses meeting the requirement of multi network management or network backups
- ✓ Network modes such as Redundant mode, Switching mode and Dual IP mode
- ✓ Conversion between Modbus RTU/ASCII and Modbus TCP protocol
- ✓ Support RTU Master, RTU Slave, ASCII Master, ASCII Slave and other operating modes
- ✓ Support up to 256 Modbus TCP client (master) accesses and connect up to 128 Modbus TCP server (slave) devices
- ✓ Support Virtual and Real ID mapping to achieve flexible access between Master and Slave devices
- ✓ Support IP Address and MAC address filtering, which can achieve accurate access control easily
- ✓ SSHD and HTTPS can guarantee the access security of data
- ✓ Graded user management to implement humanized authority management
- ✓ Multiple configuration like Windows configuration tool, TELNET, SSHD and WEB
- ✓ Support multiple alarm methods, including E-mail alarm, log alarm and SNMP Trap alarm
- ✓ Conduct network diagnosis and troubleshooting via Ping and Traceroute
- ✓ Support 8 of RS232/485/422 Serial ports
- ✓ Support 110bps to 115200bps line speed and non-blocking communication
- ✓ Support RTS/CTS, DTR/DSR and XON/XOFF flow control
- ✓ Support response timeout setting of characters
- ✓ Support Serial port status and parameters monitoring, ensuring the communication status is easy to read
- ✓
- ✓ Support 12 to 48VDC power supply input
- ✓ Support -40 to 75°C wide operating temperature range

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Specification

Ethernet

Standard : 10Base-T, 100Base-TX
Protocol : TCP, IP, UDP, ARP, HTTP, TELNET, SNMP, ICMP, DHCP,
DNS, Modbus RTU/TCP, IPv4, IPv6
Rate : 10/100M Automatic Flow Control, MDI/MDI-X Auto Tunning
Ports : 2
Connector : RJ45
Duplex mode : Full/Half Duplex Mode Auto adjustable

Serial Port

Standard : EIA RS-232C, RS-485, RS-422
Protocol : Modbus RTU/ASCII
Ports : 8 3IN1 serial ports
RS-232 signal : DSR, RTS, GND, TXD, RXD, DCD, CTS, DTR
RS-485 signal : D+, D-, GND
RS-422 signal : T+, T-, GND, R+, R-
Baud rate : 110-115200bps
Data bit : 7bit, 8bit
Parity bit : None, Even, Odd, Space, Mark
Stop bit : 1bit, 2bit
Connectors : RJ45
Flow control : RTS/CTS, DTR/DSR, XON/XOFF
Directional control : Automatic Data Direction Control
Pull high/low resistor : 4.7kΩ
Isolation : 3KVDC/2KVrms Electromagnetic
Modes : RTU Master, RTU Slave, ASCII Master and ASCII Slave
Modes : Support up to 256 Modbus TCP client (Master) accesses and connect up to
128 Modbus TCP server (slave) devices

Management : IPv4, IPv6, WEB, TELNET, Windows tool, SSHD configuration

Security : User right classification, IP address filtering, MAC address filtering, SNMP/
Mail /System Log alarm, HTTP/HTTPS/SSHD/TELNET access control

Indicator : Power supply, LINK/ACT, Ethernet port, Serial port

Power Supply: 12 to 48VDC, 3-pin 5.08mm pitch terminal blocks

: Reverse Polarity Protection

Power Consumption: No-load: 3.4W@12VDC, Full-load: 4.1W@12VDC

Working Environment

Operating temperature : -40 to 75°C
Storage temperature : -40 to 85°C
Relative humidity : 5% to 95% non condensing

Physical Characteristic

Ingress Protection : IP30 protection, Metal
Installation : Wall or desktop mounting. DIN rail accessories
Dimension : 170mm×32.6mm×110mm (W x H x D):
Weight : ≤ 590g

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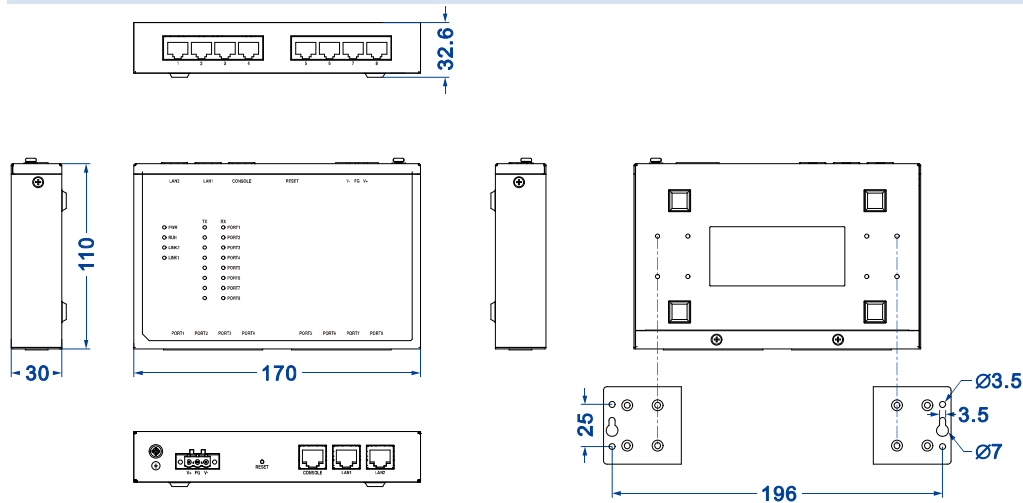


DIP switch for factory defaults.

Industrial Standard tested for

IEC 61000-4-2 (ESD, electrostatic discharge), Level 3
 Air discharge: $\pm 8\text{kV}$
 Contact discharge: $\pm 6\text{kV}$
 IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3
 Power supply: $\pm 2\text{kV}$
 Signal: $\pm 1\text{kV}$
 IEC 61000-4-5 (Surge), Level 3
 Power supply: common mode $\pm 2\text{kV}$, differential mode $\pm 1\text{kV}$
 Signal: common mode $\pm 1\text{kV}$, differential mode $\pm 1\text{kV}$
 Shock: IEC 60068-2-27
 Free fall: IEC 60068-2-32
 Vibration: IEC 60068-2-6

Dimensions



Product Ordering Code : SC10E08M I U TD

SC10E08 : Base Model for 8 Port Modbus Gateway
 M : Modbus RTU / ModbusTCP Protocol support
 I : Isolated Serial Ports
 U : RS232/485/422 3 in 1 Serial Ports
 TD : Fixed