MGT571

4G Industrial LTE DTU

- Support 1 RS232/485/422 port for converting full-network 4G wireless signals
- Support configuration/query of device parameters by the upper computer through serial AT commands
- Support remote configuration/query of device parameters through MAIWE cloud platform
- Support multiple operation modes: simple transparent transmission, Alibaba MQTT, China Mobile OneNET MQTT protocol, Modbus protocol, DDP/DC protocol
- In simple transparent transmission mode, support TCP/UDP Server and TCP/UDP Client
- Support heartbeat and registration packet functions, including ICCID, IMEI, user-defined data types, etc. User-defined types can be in hexadecimal or string format
- Support automatic reconnection in case of network disconnection
- Feature an external independent hardware watchdog design to prevent system crashes

Product Description

MGT571 industrial wireless 4G DTU is a terminal device for wireless data transmission based on mobile, China Unicom, and China Telecom networks. It provides a wireless data transmission channel with TCP/IP network protocol for industrial users. It can offer full transparent data channels to achieve bidirectional transparent data transmission from serial ports to the network, enabling wireless data communication between on-site RS232/485/422 bus devices and central control systems. This makes industrial communication smoother, more reliable, and faster, meeting the ever-evolving demands of customers for enhancing value-added applications.

4G DTU offers a wide range of DC power supply inputs. In terms of installation, MGT571 series industrial 4G DTU uses wall-mounted installation. The product adopts an industrial-grade quality design for core components, providing advantages such as wide network coverage, flexible and quick network deployment, and low operating costs. It can be used in various industries, including power systems, industrial monitoring, traffic management, meteorology, water treatment, environmental monitoring, finance and securities, coal mining, petroleum, etc. It is used for remote field data collection, remote monitoring, on-site control, and is an essential industrial communication product for the development of the industrial Internet of Things.

Features and Benefits

- High-performance embedded 4G DTU for the industrial communication field, compatible with RS232/485/422 buses commonly used in industrial settings, meeting diverse user requirements
- Support configuration/query of device parameters by the upper computer through serial AT commands
- Support configuration/query of device parameters through the MAIWE cloud platform
- Support TCP/UDP Server and TCP/UDP Client modes
- Support SSL encryption function (only firmware version V1.5.xx and above)
- Support ICMP detection, PPP layer heartbeat, TCP/IP layer heartbeat, and ping function (only firmware version V2.0.xx and above)
- Support 2 socket connections
- Network heartbeat at the TCP/IP layer
- Support heartbeat and registration packet functions, including ICCID, IMEI, user-defined data types, etc.
- Support automatic reconnection in case of network disconnection
- Support automatic reconnection in case of network data reception timeout
- Support transparent transmission, MAIWE communication protocol, Alibaba MQTT, China Mobile OnetNet MQTT, Modbus, DDP/DC
- Support RS232/485/422 standard buses
- Support serial data reception, packing based on length and time
- Support SMS function in both Chinese and English
- Support FTP remote upgrade

Specification

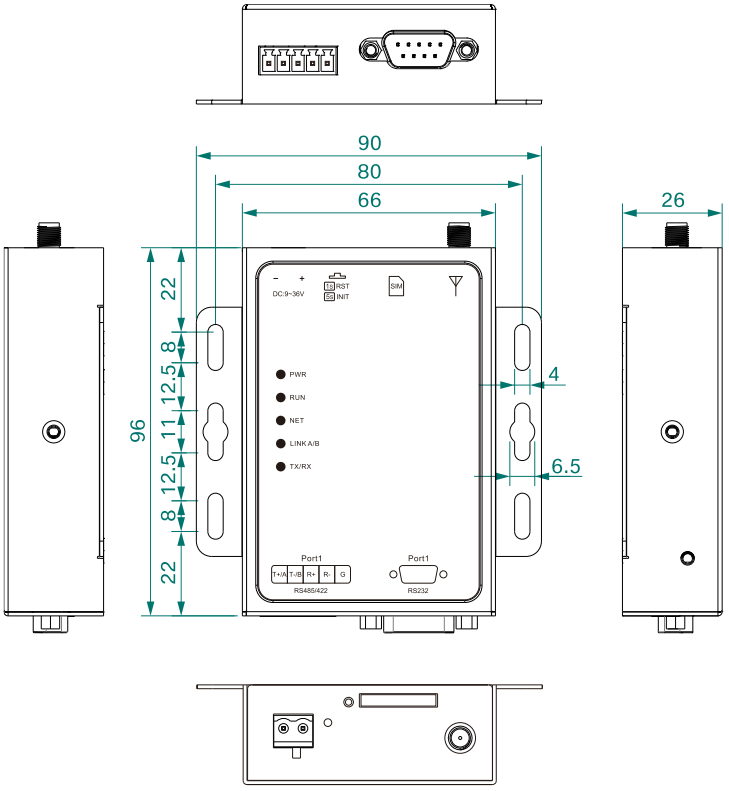
Software	
Network Protocol	IPv4
User Configuration	AT Command
Operation Mode	Simple Transparent Transmission, Alibaba MQTT, China Mobile OneNET MQTT Protocol, Modbus, DDP/DC Protocol
MQTT	Alibaba MQTT, China Mobile OneNet MQTT
SMS	Supports Chinese and English SMS
Registration Package/ Heartbeat Package	Include ICCID, IMEI, user-defined data, etc. User-defined data types support both hexadecimal and string formats
Serial Port Data Packaging	Time and length are configurable, with packet lengths ranging from 1 to 1000 bytes and packet times from 10 to 60000 milliseconds. (Different software versions may have differences in the packet mechanism; specific details can be consulted with our customer service personnel.)
Network Cache	Sending: 1 Kbyte; Receiving: 1 Kbyte
Serial Port Cache	Sending: 1 Kbyte; Receiving: 1 Kbyte
Remote Configuration	Support
Supporting Software	DTU configuration tool
4G Cellular Network	
Working Frequency	LTE-FDD: B1/B3/B5/B8 LTE-TDD: B38/B39/B40/B41 WCDMA: B1/B8 TD-SCDMA: B34/B39 CDMA: BC0 GSM: 900/1800MHz
Interface	
Antenna Connector	1 *antenna connector using SMA-K (external thread, inner hole)
Serial Port	Serial Port: 1 RS232/485/422 Connection Method: RS485/422 uses 5-position 3.81mm pitch terminal blocks, RS232 uses DB9M Baud Rate: 600bps~460800bps Data Bits: 7-bit, 8-bit Stop Bits: 1-bit, 2-bit Parity: None, Odd, Even

Specification

SIM Card	1* SIM card slot(Standard)
Button	One-key restart or restore to factory settings button
Status LED	Power Indicator, Operation Indicator, Network Indicator, Link A/B Indicator, Serial Port Transmit and Receive Data Indicator
Power Supply	
Input Voltage	DC9~36V, reverse polarity protection
Power Consumption	Average 58mA@DC12V, Maximum 186mA@DC12V
Connection	2-pin 5.08mm pitch terminal block
Physical Characteristics	
Dimensions	96×90×26 mm (mounting clips included)
Installations	Wall mount
IP Code	IP40
Working Environment	
Operating Temp	-40℃~+85℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
Industry Standard	
EMC	IEC 61000-4-2 (ESD): contact discharge ±8kV, air discharge ±15kV IEC 61000-4-5 (Surge): power supply: common mode ±4kV, differential mode ±2kV; RS485/422: common mode ±4kV, differential mode ±2kV IEC 61000-4-4 (EFT): power supply: ±4kV; communication port: ±2kV
Certification	CE, FCC, RoHS

Dimensions

Unit: mm



Ordering Information

Standard Model	RS232/485/422	4G Antenna	Input Voltage
MGT571	1	1	DC9~36V

Contact Us

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