USR IOT

Communication Expert
of Industrial IoT

USR-DR502-E

LTE Cat 1 Modem



Product Description

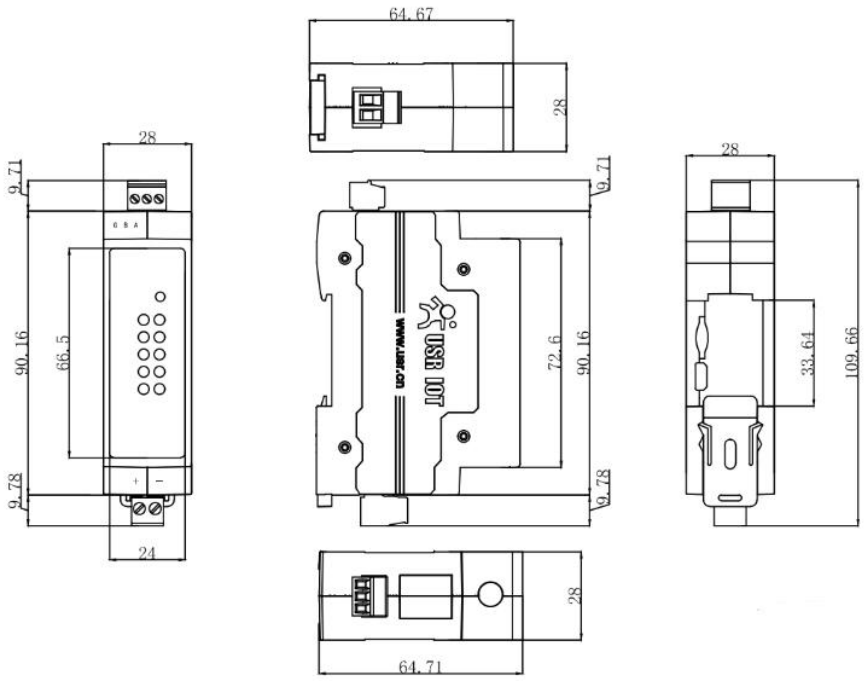
USR-DR502-E is a LTE CAT 1 secure cellular modem, which supports LTE and GSM, covers the mainstream frequency bands of European operators. It has perfect software function, supports TCP/UDP transparent transmission, TLS/SSL encryption transmission, SMS transmission,HTTPD Client mode and AT command configurati on. In addition, it is simple to configure, has high reliability and built-in hardware watchdog,supports FOTA upgrading.

Din rail industrial modem USR-DR502-E adopts wide-voltage Power supply terminals, convenient for customers to use.

Cloud support: MQTT via AWS IOT, Thingsboard, Alibaba Cloud, EMQX, Tuya,Cumulocity IoT and so on.

Features

- 9-36V wide power supply range
- LTE Cat 1 & GSM
- Transparent transmission and AT command mode
- HTTPS,MQTTS,SMS
- SMS,NET,Serial AT command configuration
- FTP Upgrade and FOTA self upgrade
- Socket Distribution Protocol



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Product Parameters

Frequency Bands

■ Europe: USR-DR502-E

LTE FDD：B1/B3/B7/B8/B20/B28
GSM：900/1800MHz

■ TX Power

GSM:900MHz: 33dBm±2dB
GSM:1800MHz: 30dBm±2dB
FDD:B1/3/7/8/20/28: 23dBm±2dB

■ Rx Sensitivity:

GSM:900MHz：-109.5dBm
GSM:1800MHz：-108dBm
FDD:B1/3/20：-98dBm
FDD:B7：-97.5dBm
FDD:B8/B28：-98.5dBm

■ Transmission Speed

LTE FDD Rel.13：10MbpsDL/5Mbps UL
GPRS：85.6KbpsDL/85.6Kbps UL(multi-slot class 12)

■ Physical Interfaces

UART: RS485 (3PIN)
USB: 2.0
USIM: 3.0V/1.8V, Micro SIM 3FF
RF: SMA
Indicators: PWR,WORK,NET,LINK,Tx,Rx,RSSI
Reload: Button
Installation: DIN-rail mounting

■ Software

TCP /UDP/IPV4/IPV6/HTTP/MQTT/DNS/SSL/TLS
ECM/RNDIS/PPP
FOTA/VoLTE/NTP/FTP
SMS:MO/MT Text and PDU modes
TCP/UDP/HTTPD/SMS transparent transmission
CMD mode,AT command operation
Socket Distribution Protocol
Base station geolocation

■ Hardware Characteristics

POWER: 9~36V
Power Consumption:＜3W
Dimensions:28mm x 64.7mm x 109.7mm
Operating temperature: -30℃~+75℃
Expansion temperature: -40℃~+85℃
Storage temperature: -40℃~+85℃
Relative Humidity: 5%~95%(non-condensing)

■ Serial

Cache：20 packets,maximum 4096 byte per packet
Baudrate：600~230400bps
Parity：NONE/ODD/EVEN
Data：8
Stop：1/2

■ Certifications

CE/RoHS

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