

WH-LTE-7S1-E

LTE Cat 1 Module



Product Description

WH-LTE-7S1 is a LTE CAT 1 secure cellular module, which supports LTE and GSM, supports TCP/UDP transparent transmission, TLS/SSL encryption transmission, SMS transmission and configuration, and also supports HTTP and MQTT protocol. At the same time, it supports AT instruction mode to realize full command operation, meets the needs of different application scenarios.

WH-LTE-7S1-E covers the mainstream frequency bands of European operators.

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

Features

- 5-16V 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

Highlights



Product Parameters

Frequency Bands

■ Europe: WH-LTE-7S1-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: 3.0V TTL

USB: 2.0

USIM: 3.0V/1.8V MINI SIM 2FF

RF: IPEX

Indicators: POWER,WORK,NET

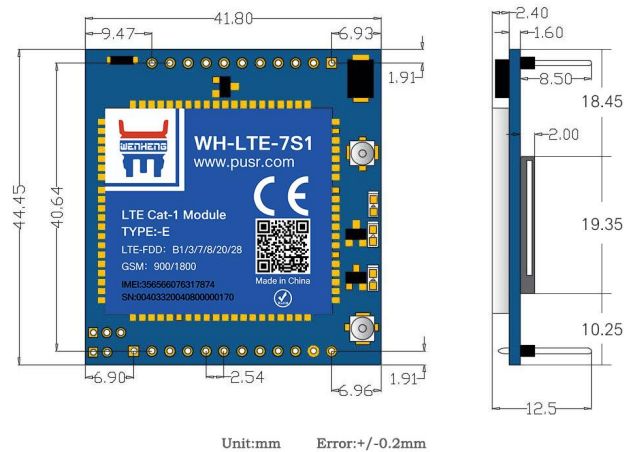
Status indicating pins: PWR,NET,WORK

Reload pin: Built-in pull-up

Reset pin: Built-in pull-up

■ Certifications

CE/RoHS



■ 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: 3.4V~4.2V / 5~16V(not coexisting)

Power Consumption: <2.7W

Dimensions (23pin): 44.4mm×41.8mm×12.5mm

Operating temperature: -30℃~+75℃

Expansion temperature: -40℃~+85℃

Storage temperature: -40℃~+85℃

Relative Humidity: 5%~95%(non-condensing)

■ UART

Cache: 20 packets,maximum 4096 byte per packet

Baudrate: 600~230400bps

Parity: NONE/ODD/EVEN

Data: 8

Stop: 1/2