

# 218E GSM/GPRS+GNSS Module

L218E is a Quad-band (850/900/1800/1900) module with low-power consumption, high performance. It combines GNSS technology with high-sensitivity receiver. Its LCC package make it easy to be soldered and produced quickly through standard SMT equipment, which adapts to the application that strictly requires cost effectiveness and efficiency.

L218E is capable of fast-positioning, build-in TCP/IP protocol, tiny package and wide work temperature. All of these make it suitable to dimension-sensitive devices and application scenarios of location.



Ouad-band



CDDC Class 12



Extended Temperature Range-40°C to +85°C



GNSS



LCC



Ecal



AT Command



Analog Audio



BT4.0 BLE



### **Main Features**

- Quad-band: GSM/GPRS 850/900/1800/1900 MHz
- GSM 2/2+ standard
- Class 4 (2W @850/900 MHZ)
- Class 1 (1W @1800/1900 MHZ)
- AT command : GSM 07.07,07.05 and enhanced AT command
- GNSS: GPS/BEIDOU(GLONASS)
- BT: BT3.0/4.0 BLE
- Voltage range: 3.4 ~ 4.2V (3.8V is recommanded)
- Operating temperature range : -40 ~ +85°C
- Storage temperature range : -45 ~ +90°C
- Dimension: 14.5\*18.5\*2.3mm
- Weight: Approx. 1.5g

#### Specification for Data

- GPRS CLASS 12
- Coding schemes CS 1,2,3,4
- PPP-stack
- Transparent Transmission Mode
- TCP/UDP/HTTP/SMTP\*
- USSD

#### Specification for SMS

- Message
- MO and MT
- Point-to-Point and cell broadcast
- TEXT and PDU mode

## Specification for Voice

- Half rate (HR)
- Full rate (FR)
- Enhanced full rate (EFR)
- Adaptive multi-rate (AMR)



## Specification for GNSS

- Receiver type
  33 tracking/99 acquisition-channel GPS receiver
- Max update rate: 10Hz
- Sensitivity

Tracking: -165dBm

Reacquisition: -160dBm

Cold starts: -148 dBm

Time-TO-First-FIX :

Cold starts : 31s(typical)

Warm starts : 26s Hot Starts : <1s

EPO Assist: 13s(CTTFF)

Accuracy

Automatic Position: 2.5m CEP

Speed: 0.1m/s

### **Interfaces**

- Analog voice
- UART
- SIM card(3V/1.8V)
- ADC
- GPIO
- USB
- GSM antenna
- GNSS antenna
- BT antenna

## Other features

- MQTT
- ECALL
- TTS\*

### Certification

• CCC/TA/CE