

<u>216E</u>

GSM/GPRS+GNSS Module

L216E 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+LGA 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.

L216E 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





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











Analog Audio



BT4.0 BLE



Main Features

- Quad-band : GSM/GPRS850/900/1800/1900 MHz Receiver type
- 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: BT4.0 BLE
- Voltage range: 3.4 ~ 4.2V (3.8V is recommanded)
- Operating temperature range : -40 ~ +85°C
- Storage temperature range : -45 ~ +90°C
- Dimension: 17.5*19*2.3mm
- Weight: Approx. 1.5g

Specification for Data

- GPRS CLASS 12
- Coding schemes CS 1,2,3,4
- PPP-stack
- Transparent TransmissionMode
- 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
- I2C
- SIM card(3V/1.8V),dual SIM card
- ADC
- GPIO
- SD
- USB
- Charging management
- GSM antenna
- GNSS antenna
- BT antenna

Other features

- ECALL
- TTS

Certification

• CCC/TA/CE