

# FDD-LTE/DC-HSPA+/UMTS/EDGE/GPRS/GSM Cellular Module

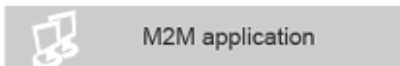
U8301 is a wireless module which is designed for the global market. It is a consumptive product; it can be designed in many kinds of applications which can work on LTE-FDD/WCDMA/EDGE/GPRS/GSM network.

On LTE-FDD network, U8301 enables connect to the Internet at DL data speed up to 100Mbps and UL data speed up to 50Mbps. in the area where LTE service are not available, U8301 still enables reliable and secure data connect over DC-HSPA+/UMTS/EDGE/GPRS/GSM network.

U8301 provides SMS, MMS, Phonebook functions as well as high speed access. And also reserves a group of PCM interface for Audio function. It can be designed in many kinds of applications. Such as Data card, Video monitor, Tablet, Electric-book, MID, Vehicle equipment, etc.



LTE-FDD



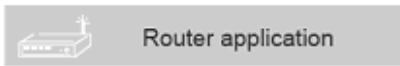
M2M application



PCI Express Mini Card Standard Interface



Receive diversity



Router application



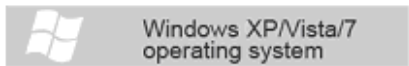
RoHS compliance



AT Command



USB 2.0 interface



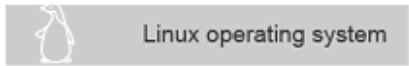
Windows XP/Vista/7 operating system



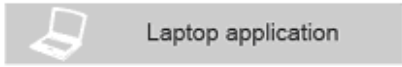
Surveillance application



UART interface



Linux operating system



Laptop application



# U8301

## LTE-FDD Cellular Module

### General features:

- LTE-FDD Band1/3/5/7/8
- DC-HSPA+/UMTS Band1/5/8
- GSM Quad-band 850/900/1800/1900
- EDGE multi-slot class 12
- GPRS multi-slot class 12
- Compliant to GSM phase 2/2+
- Output power:
  - Class 3 (0.25W) for LTE/UMTS
  - Class 4 (2 W) for GSM850/900
  - Class 1 (1 W) for GSM1800/1900
- Control via AT commands (3GPP TS27.005/3GPP TS27.007 )
- Supply voltage range 3.0V-3.6V
- Low Power consumption
  - Sleep mode: 5mA
  - Power down 50  $\mu$ A
- Dimensions: 51.0×30.0×4.6mm
- Temperature range
  - Normal Operation: -20°C to +65°C
  - Restricted Operation: -30°C to +75°C

### Specifications for data:

- Support Release 9 Category 3
- LTE-FDD up to 100 Mbps DL, 50 Mbps UL
- DC-HSPA+ up to 42 Mbps DL
- HSPA+ up to 21 Mbps DL
- EDGE class 12: 237kbps DL/118kbps UL
- GPRS class 10: 85.6kbps DL/85.6kbps UL
- CSD up to 14.4 kbps
- Non transparent mode
- PBCCH support
- PPP-stack
- Coding schemes CS 1,2,3,4

### Specifications for SMS:

- Point-to-point MO and MT
- SMS cell broadcast
- Text and PDU mode

### Additional features:

- Phone book
- Real time clock
- DTMF

### Interfaces:

- Hirose's U.FL-R-SMT 50 \_ RF connector  
PCI Express® Mini Card Interface
- Power supply
  - USB 2.0 high speed
  - UICC/SIM card interface 3 V, 1.8 V
  - UART
  - PCM
- Antenna connector

### Approvals:

- RoHS