

















## LTE-TDD/LTE-FDD/TD-SCDMA/UMTS/EVDO/EDGE/ GPRS/GSM/CDMA/GPS Cellular Module

U8300C 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-TDD/LTE-FDD/TD-SCDMA/UMTS/EVDO/EDGE/GPRS/GSM/CDMA network.

On LTE-TDD network, U8300C enables connect to the Internet at DL data speed up to 61Mbps and UL data speed up to 18Mbps. On LTE-FDD network at speed up to 100Mbps DL and 50Mbps UL, in the area where LTE service are not available, U8300C still enables reliable and secure data connect over 3G(TD-SCDMA/UMTS/EVDO) or 2G(EDGE/GPRS/CDMA) network.

U8300C provides SMS, MMS, Phonebook functions as well as high speed access, and also 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-TDD/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	 GPS	



## U8300C

### LTE-TDD/LTE-FDD Cellular Module

#### General features:

- EDGE multi-slot class 12
- GPRS multi-slot class 12
- Compliant to GSM phase 2/2+
- Output power:
  - Class 3 (0.25W) for LTE/TD-SCDMA/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 3.3V-3.6V
- Low Power consumption
  - Sleep mode: 5mA
  - Power down 50  $\mu$ A
- Dimensions: 51.0 $\times$ 30.0 $\times$ 4.6mm
- Temperature range
  - Normal Operation: -20°C to +65°C
  - Restricted Operation: -30°C to +75°C
  - Storage Operation: -40°C to +85°C

#### Specifications for SMS:

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

#### Band Configuration:

U8300C:

- LTE-TDD Quad-band
  - Band 38/39/40/41
- LTE-FDD Dual-band Band 1/3
- TD-SCDMA Dual-band Band 34/39
- UMTS Single band Band 1
- EVDO Single band 800MHz
- CDMA1x Single band 800MHz
- GSM Quad-band 850/900/1800/1900

#### Specifications for GPS:

- Support 55 channel
- TTFF
  - Cold Start: 32S
  - Warm Start: 29S
  - Hot Start: 1S
- Sensitivity
  - Cold Start: -145dBm
  - Acquisition: -160dBm
  - Tracking: -161dBm

#### Approvals:

- RoHS
- CCC
- CTA

#### Additional features:

- Phone book
- PCM and analog Audio
- DTMF

#### Specifications for data:

- Support Release 9 Category 3
- LTE-FDD up to 100 Mbps DL, 50 Mbps UL
- LTE-TDD up to 61 Mbps DL, 18 Mbps UL
- TD-SCDMA up to 4.2 Mbps DL, 2.2 Mbps UL
- DC-HSPA+ up to 42Mbps DL, 5.76Mbps UL
- 1xEV-DO<sub>r</sub>B up to 14.7Mbps FL, 5.4Mbps RL
- 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
- FOTA
- TCP/IP
- NDIS

#### Interfaces:

- RF connector
- PCI Express® Mini Card Interface
  - Power supply
  - USB 2.0 high speed
  - UICC/SIM/UIM card interface 3 V, 1.8 V
  - UART
  - Analog Audio
  - PCM
- Antenna connector