

## LTE/WCDMA/GSM Module

### GM500 PCIE



PCIE Form Factor



GNSS



Rx diversity



LTE FDD & WCDMA  
& GSM



Embedded TCP/UDP



Embedded FTP/HTTP



LTE FDD: DL 150Mbps  
/ UL 50Mbps



UART



USB 2.0



Pin-to-Pin with PCIE



-40°C ~ 85 °C



Auto suspend &  
remote wakeup

### For M2M Applications

**GM500 PCIE** is designed to provide customers with global network coverage on the connectivity of LTE. It delivers 50Mbps upload and 150Mbps download data rates on LTE networks and can also be fully backward compatible with existing 3G and 2G networks.

Rx diversity which allows the end-device to be equipped with two distinct cellular antennas improving the quality and reliability of the wireless connectivity.

A rich set of internet protocols (PAP and CHAP used for PPP connections) and abundant functions (GNSS, Remote wakeup, TCP/UDP, FTP, SMS, FOTA) extend the applicability of the module to a wide range of M2M applications.

GM500 PCIE can be widely used in M2M industries such as smart meter, Security and monitor, Industrial router, DTU, CPE, Telematics etc. It also allows the integration of automotive and other applications requiring assured extended operating temperature range and mechanical ruggedness within the ever-shrinking space inside electronic bays in trucks, automobiles, and other mobile platforms.



### GM500 PCIE Series

PID	Band	Rx Diversity	GNSS	Category
U1A_MPO	1. LTE FDD: B2, B4,B5,B12 2. WCDMA: B2,B5 3. GSM: B2, B5	1. LTE FDD: B2, B4,B5,B12 2. WCDMA: B2,B5	Yes	Cat4

### General Features

- ❑ Pin-to-Pin with PCIE
- ❑ Support LCC 30\*30
- ❑ Dimensions: 51mm × 31mm× 4.75mm
- ❑ Weight: About 10.0g
- ❑ Frequency Band :
  - LTE FDD/WCDMA/GSM
- ❑ BD/GLONASS/GPS

### Electrical & Sensitivity

- ❑ Transmit Power:
  - LTE: 23 ±2.7dBm (Power Class 3)
  - WCDMA : 24 +1/-3dBm (Power Class 3)
  - GSM900 : 33±2dBm (Power Class 4)
  - GSM1800: 30±2dBm (Power Class 1)
- ❑ Receiving sensitivity:
  - Rx Diversity
- ❑ Power Supply :
  - 3.0V -- 4.0V (3.3V is recommended)

### Driver & Tools

- ❑ Drivers
  - Windows XP, 7 , 8, 10
  - Linux
  - Android
- ❑ Diag-log Tool
- ❑ Firmware Update Tool

### Environmental

- ❑ Operation temperature: -30°C to +75°C
  - Extreme Operating temperature: -40°C to +85°C
- ❑ Storage temperature: -40°C to +85°C
- ❑ Humidity: 5%~ 95%

### Data Features

- ❑ LTE FDD (CAT4)
  - Uplink 50Mbps / Downlink 150 Mbps
- ❑ LTE FDD (CAT1)
  - Uplink 5Mbps / Downlink 10 Mbps
- ❑ WCDMA
  - Uplink 5.76Mbps / Downlink 42Mbps
- ❑ GPRS (Multi-slot Class 10)
  - Uplink 85.6 kbps / Downlink 85.6 kbps

### SMS Features

- ❑ Support Text and PDU mode
- ❑ Point to point MO and MT
- ❑ SMS Status Report
- ❑ SMS centre address setting
- ❑ Management of SMS

### Interfaces

- ❑ USB 2.0
- ❑ UART
- ❑ SIM interface (1.8/3.0V)
- ❑ Antenna (RF PAD for Primary, Diversity and GPS)
- ❑ LED indication
- ❑ Reset & Power-on
- ❑ WAKE-IN & WAKE-OUT
- ❑ GNSS

### Applications

- ❑ Support embedded TCP & UDP protocols
- ❑ HTTP/FTP
- ❑ FOTA
- ❑ Muti-APN
- ❑ Support protocols PAP and CHAP used for PPP connection
- ❑ USB Selective Suspend & Remote wakeup
- ❑ RAS /ECM/NDIS
- ❑ Control Via AT Commands according to 3GPP TS27.005, 27.007 and GOSUNCN extended AT commands

\*Notes: The pictures are just for reference, please in kind prevail.