













# LTE/WCDMA/GSM Module

## GM500

 LCC Form Factor	 GNSS	 Rx diversity
 LTE FDD/WCDMA & GSM	 Embedded TCP/UDP	 Embedded FTP/HTTP
 LTE FDD: DL 150Mbps / UL 50Mbps	 8-wires UART	 USB 2.0
 Pin-to-Pin with LCC 30*30 serial module	 -40°C ~ 85 °C	 Auto suspend & remote wakeup

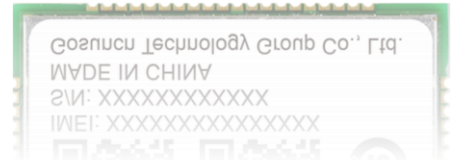
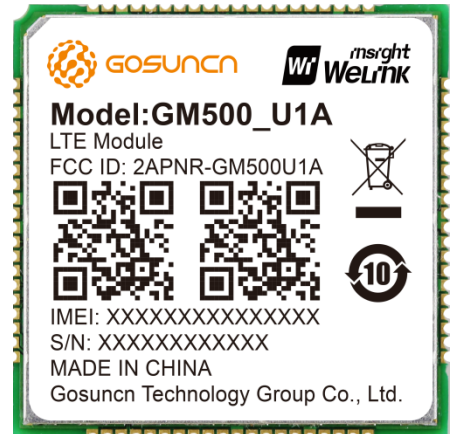
### For M2M Applications

**GM500** 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. GM500 is P2P with ME3630 series.

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, HTTP, SMS) extend the applicability of the module to a wide range of M2M applications.

**GM500** 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.





### General Features

- ❑ LCC Form Factor (80 pins)
- ❑ Pin-to-Pin with LCC 30\*30
- ❑ Dimensions: 30mm × 30mm × 2.4mm
- ❑ Weight: About 4.0g
- ❑ 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 :
  - 3.4V -- 4.2V(3.8V is recommended)

### 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%

### GM500 Serials

PID	Band	Rx Diversity	GNSS	Category
U1A	1. LTE FDD: B2, B4,B5,B12, B17 2. WCDMA: B2,B5 3. GSM: B2, B5	1. LTE FDD: B2, B4,B5,B12, B17 2. WCDMA: B2,B5	Yes	Cat4

### Data Features

- ❑ LTE FDD (CAT4)
  - Uplink 50Mbps / Downlink 150 Mbps
- ❑ LTE TDD (CAT4)
  - Uplink30Mbps / Downlink 112Mbps
- ❑ WCDMA
  - Uplink 5.76Mbps / Downlink 42Mbps
- ❑ GPRS (Multi-slot Class 10)
  - Uplink 85.6 kbps / Downlink 85.6 kbps

### Interfaces

- ❑ USB 2.0 High speed (480 Mbps)
- ❑ UART1(8-wires)
- ❑ UART2(2-wires)
- ❑ SIM interface (1.8/3.0V)
- ❑ SPI
- ❑ I2C
- ❑ Antenna (RF PAD for Primary, Diversity and GPS)
- ❑ LED indication
- ❑ Reset & Power-on
- ❑ WAKE-IN & WAKE-OUT

### Applications

- ❑ Support embedded TCP & UDP protocols
- ❑ 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

### SMS Features

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

### Driver & Tools

- ❑ Drivers
  - Windows
  - Linux
  - Android
- ❑ Diag-log Tool
- ❑ Firmware Update Tool

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

