



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℃ ~ 85 ℃



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.



LTE/WCDMA/GSM Module





General Features

■ LCC Form Factor (80 pins)

☐ Pin-to-Pin with LCC30*30

 $f \square$ Dimensions: 30mm imes 30mm imes 2.4mm

■ Weight: About 4.0g

■ Frequency Band :

- LTE FDD/WCDMA/GSM

■ BD/GLONASS/GPS

Electrical & Sensitivity

■ Transmit Power:

- LTE: 23 \pm 2.7dBm (Power Class 3)

WCDMA: 24 +1/-3dBm (Power Class 3)

- GSM900: 33 ± 2 dBm (Power Class 4)

- GSM1800: 30 ± 2 dBm (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 $^{\circ}$ C to +85 $^{\circ}$ C

 $\hfill\Box$ Storage temperature: -40 $^{\circ}$ C to +85 $^{\circ}$ C

■ Humidity: 5%~ 95%

GM500 Serials

PID	Band	Rx Diversity	GNSS	Category	Operator
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	AT&T T-Mobile
U1V	1. LTE FDD:B4,B13	1. LTE FDD:B4,B13	Yes	Cat4	Verizon

GM500

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

□ 12C

☐ Antenna (RF PAD for Primary, Diversity and GPS)

■ LED indication

■ Reset & Power-on

■ WAKE-IN & WAKE-OUT

■ 2nd SIM(Only support by PID:A1C in developing)

■ SDCC(Only support by PID:A1C in developing)

■ Ethernet (Only support by PID:A1C in developing)

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 XP, Vista, 7, 8, Win CE, Windows Mobile

- Linux

- Android

■ Diag-log Tool

☐ Firmware Update Tool

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

* is in developing.

