GOSUNCN

Cat-M/NB-IoT Module

GM100

- **LCC** LCC+LGA Form Factor
- NB-IoT/Cat-M/GPRS
- CoAP/MQTT
- **$** Ultra Low Power Consumption
- **UART** 2 x UARTs
- GNSS
- -40℃ ~ 85 ℃
- PSM & eDRX
- VoLTE
- Embedded TCP/UDP
- **0101 1010** Enhanced AT Commands
- Ultra small package

M2M Application

GM100 is a ultra small package NB-IoT/Cat-M/GPRS module. The dimensions of GM100 is : 20mm × 24mm× 2.3mm , and it is fully compatible with 3GPP R14 standard. GM100 can support VoLTE under Cat-M mode, that means it can support mobility and lower power consumption, and these three advantages make it more popular in Smart meter, Smart city, wearable devices and tracker industries.

GM100 is designed for low-power, wide-area, massive IoT connection, multiple protocols including CoAP, TCP/UDP, MQTT, OMA-LWM2M, DTLS , CM oneNET are embedded in it. GM100 can support PSM and eDRX low-power working mode.

GOSUNCN

Model:GM100   PID:XXX

Cat-M/NB-IoT Wireless Data module

IMEI:XXXXXXXXXXXXXX
S/N:XXXXXXXXXXX
Gosuncn Technology Group Co., Ltd.
MADE IN CHINA

Welink your smart

Cat-M/NB-IoT Module

GM100

General Features

- ☐ LCC+LGA Form Factor
- ☐ Dimensions: 20mm $\times$ 24mm$\times$ 2.3mm
- ☐ 3GPP R14 support
- ☐ VoLTE*
- ☐ GNSS
- ☐ Band support：
  - NB-IoT/Cat-M Band1/2/3/4/5/8/12/13/14*/18/19/20/25/26/28/66/71*/85
  - GPRS Band 2/3/5/8

Data Rate

- ☐ LTE-CatM
  - Uplink 1119Kbps / Downlink 588Kbps
- ☐ NB-IoT
  - Uplink 158.5Kbps / Downlink 127Kbps
- ☐ EDGE (Multi-slot Class 12)
  - Uplink 236.8Kbps / Downlink 296Kbps
- ☐ GPRS (Multi-slot Class 10)
  - Uplink 85.6Kbps / Downlink 107Kbps

GM100 Series

PID	Band
G1A	NB-IoT/Cat-M: Band1/2/3/4/5/8/12/13/14*/18/19/20/25/26/28/66/71*/85 GPRS: Band 2/3/5/8

*Note: Band14 only support Cat M1
Band71 only support Cat NB1/NB2
VoLTE is under Developing

Electrical & Sensitivity

- ☐ RF Power:
  - NB-IoT: 23 $\pm$2.7dBm
- ☐ Power Supply:
  - 3.0V –4.2V (3.6V is recommended)

Interfaces

- ☐ UART
- ☐ USB
- ☐ SIM interface (1.8V)
- ☐ RF PAD for Primary Antenna
- ☐ Reset & Power-on
- ☐ ADC
- ☐ IIS
- ☐ GPIO
- ☐ WAKEUP_IN/WAKEUP_OUT

Applications

- ☐ CoAP/OMA-LWM2M/CM oneNET/MQTT
- ☐ TCP/UDP
- ☐ HTTP/HTTPS
- ☐ FOTA
- ☐ GOSUNCN extended AT commands

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%