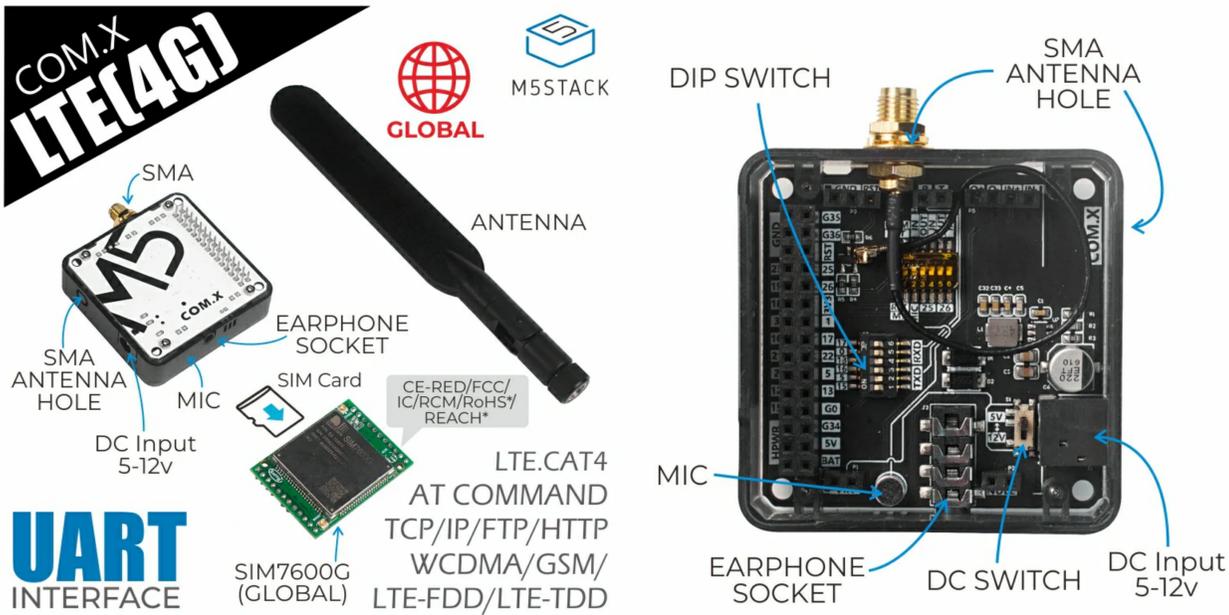# COM.LTE(4G)

SKU:M031-A

Description

COM.LTE(4G) is a stackable multifunctional LTE communication module, built-in LTE communication module SIM7600G, supports LTE-TDD/LTE-FDD/WCDMA and GSM frequency bands, supports LTE.CAT4 (downlink speed is 150Mbps), supports voice calls SMS with SMS.

It has stable performance, small appearance, high cost performance, and can realize the transmission of SMS and data information with low power consumption. The module has a DC power input and can provide 5V-12V power supply through an external power supply.

In order to facilitate the user to configure the pin, the DIP switch is used to set the pin. The onboard microphone and 3.5mm headphone jack support the insertion of headphone with microphone. This module is especially suitable for scenarios that require high-speed network connections, such as video calls, drone data transmission, industrial Internet of Things, etc.

Notice

> When used with the **FIRE** main control, due to the PSRAM pin conflict, please switch the DIP switch pins of the module base to TX(0/13), RX(5/15), and the device can use USB/ External DC is used for power supply.

> When used with **Core2** series main control, due to the different order of the base pin array, COM.X base pins TX(16), RX(17) correspond to the actual pins TX(14), RX of the Core2 main control (13) The equipment needs to use external DC for power supply.

> Note: When using the CORE2 or CORE2-FOR-AWS main control to drive the module, please use the DC power input of the base and set the power mode to input mode (refer to the code below), otherwise it will not start normally
>
> ```
> //mbus_mode_t:
> //kMBusModeOutput: Use USB or battery power
> //kMBusModeInput: Use external power supply 5V or DC interface
> ```

```
//kMBusModeInput: Use external power supply 5V, or DC interface

M5.begin(true, true, true, false, kMBusModeInput);

//Initialize Serial according to the actual connected pins
Serial2.begin(115200, SERIAL_8N1, 13, 14);
```

> The module base has a DC power input interface. Please strictly follow the input range (5-12V) to prevent damage to the module when using this interface to connect to the power supply. The internal power DIP switch can adjust the voltage level of the internal terminal VIN to adapt to different modules.

5.5mm
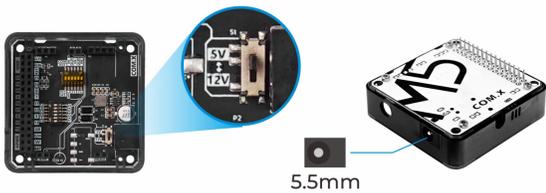
Product Features

- Stackable design
- Support voice calls, SMS text messages, cellular data transmission
- Independent external power supply
- Built-in microphone
- AT command control
- SIM card type: MicroSIM
- Status signal: two LED indicators
- External antenna: SMA antenna
- Serial communication: UART 115200bps

- Frequency band:
  - LTE-TDD B34/B38/B39/B40/B41
  - LTE_FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/ B18/B19/B20/B25/B26/B28/B66
  - WCDMA B1/B2/B4/B5/B6/B8/B19
  - GSM/GPRS/EDGE 850/900/1800/1900MHz

- Data transmission speed:

- LTE Cat4
  - UL:50Mbps
  - DL:150Mbps

- HSPA+
  - UL:5.76Mbps
  - DL:42Mbps

- WCDMA
  - UL/DL:384Kbps

- EDGE/GPRS
  - UL/DL:236.8Kbps

- Protol
  - TCP/IP/IPV4/IPV6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS

  - TLS
  - RNDIS/ECM

○ FOTA

Certification

- CE/RCM/FCC/IC

- PTCRB/GCF

- AT&T/Verizon

- RoHS/REACH

Include

○ 1x COM.LTE module
○ 1x SMA antenna

Applications

○ Remote meter reading system
○ Automatic Web Spider SMS-notifier
○ Wireless communication
○ M2M industrial
○ Vehicle-mounted
○ Video

Specification

Resources	Parameter
Frequency band	LTE-FDD/LTE-TDD/WCDMA/GSM
Network protocol	TTCP/IP/IPV4/IPV6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS etc.
Communication	UART 115200bps
DC interface specifications	5.5mm
Net weight	55g
Gross weight	90g
Product Size	54.2*54.2*13.2mm
Package Size	165*60*36mm

Operator frequency bands in some countries

The following content is for reference only.

North America	B4 (1700), B12 (700), B66 (1700), B71 (600), B26 (850)
Asia Pacific	B1(2100), B3(1800), B5(850), B8(900), B18(850), B20(800), B26(850),B28(700)

North America	B4 (1700), B12 (700), B66 (1700), B71 (600), B26 (850)
Europe:	B3 (1800), B8 (900) , B20 (800)
Latin America	B2(1900), B3(1800), B5(850), B28(700)
Commonwealth of Independent States	B3 (1800), B8 (900), B20 (800)
Sub-Saharan Africa	B3(1800), B8(900)
Middle East, North Africa	B8(900), B20(800)

EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification.

Download Windows Version Easyloader   Download MacOS Version Easyloader

Description:
Check signal strength,Register to the network,5 and 13 of the DIP switch are set to ON.

Related Link

○ **Datasheet**

  ○ SIM7600G datasheet

○ **AT Command**

  ○ SIM7600G AT Command
  ○ SIM7500_SIM7600_SIM7800 Series_TCPIP_AT Command Manual_V1.00

Schematic

PinMap

M5Stack	TX(GPIO0/13/17)	RX(GPIO5/15/16)	5V	GND
COM.LTE	RX	TX	VIN	GND

Example

Arduino

Arduino Example Code

UIFlow

UIFLow Network Over COM.LTE Tutorial

Last updated: 2021-1-15