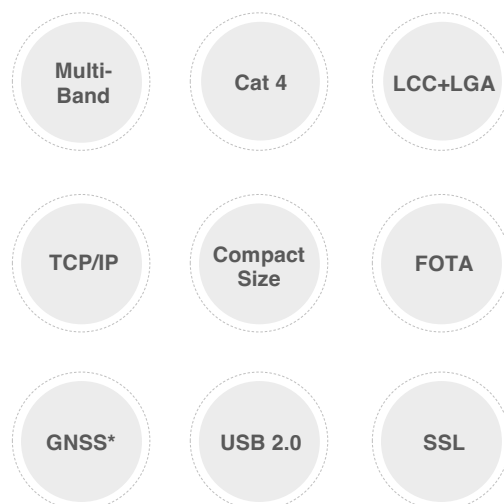
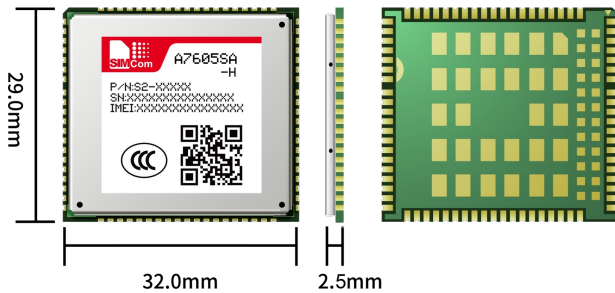


V: 2020.02

# A7605SA-H

## SIMCom LTE Cat 4 Module



## Product Description

A7605SA-H is the LTE Cat 4 module which supports wireless communication modes of LTE-TDD/LTE-FDD/HSPA+/GSM/GPRS/EDGE. It supports maximum 150Mbps downlink rate and 50Mbps uplink rate.

A7605SA-H supports multiple built-in network protocols, supports drivers for main operation systems (USB driver for Windows, Linux and Android etc.) and software function, AT commands are compatible with SIM7600 series modules. Meanwhile A7605SA-H integrates main industrial standard interfaces, with powerful expansibility, including abundant interfaces such as UART, USB, I2C, GPIO, which is suitable for main IoT applications such as telematics, surveillance devices, CPE, industrial routers, and remote diagnostics etc.

## Key Benefits

- ◆ LCC+LGA form factor with abundant interfaces
- ◆ Suitable for LTE, UMTS and GSM networks
- ◆ Abundant software functions: FOTA, LBS, SSL
- ◆ The AT commands of A7605SA-H are compatible with SIM7600 series modules

## General Features

Frequency Bands	LTE-TDD B38/B41
	LTE-FDD B1/B2/B3/B4/B5/B7/B8/B20/B28/B66
	UMTS/HSPA+ B1/B2/B5/B8
	GSM/GPRS/EDGE 850/900/1800/1900 MHz
Supply Voltage	3.4V ~ 4.2V, Typ: 3.8V
Control Via AT Commands	
Operation temperature	-30°C ~ +80°C
Dimensions	29.0*32.0*2.5mm
Weight	4.6±0.1g

## Data Transfer

LTE Cat 4	Uplink up to 50Mbps
	Downlink up to 150Mbps
HSPA+	Uplink up to 5.76Mbps
	Downlink up to 42 Mbps
UMTS	Uplink/Downlink up to 384Kbps
EDGE	Uplink/Downlink up to 236.8Kbps
GPRS	Uplink/Downlink up to 85.6Kbps

### Note

\*: optional  
#: on going

## Other Features

USB Driver for Microsoft Windows 7/8/10
USB Driver for Linux /Android
RIL supporting for Android 5.0/6.0/7.0/8.0/9.0
Firmware update via USB/FOTA
TCP/IP/IPV4/IPV6/MultiPDP/FTP/FTPS/HTTP/HTTPS/DNS
RNDIS/PPP/ECM
SMS
SSL

## Interfaces

USB2.0
UART
(U)SIM card(1.8V/3V )
PCM
Analog audio
RMII*
PCIE* ( Host Mode)
MMC/SD
SDIO*
ADC
I2C
GPIO
Antenna: Primary/Diversity*/GNSS*

## Certifications

RoHS#/REACH#

**FCC Statement**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Important Note:

**Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/Canada.

This device is intended only for OEM integrators under the following conditions:

1. The antenna must be installed such that 20 cm is maintained between the antenna and users, and
  2. The transmitter module may not be co-located with any other transmitter or antenna,
- As long as the three conditions above are met, further transmitter testing will not be required.

However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

**Important Note:**

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

**End Product Labeling**

The final end product must be labeled in a visible area with the following" Contains FCC ID: 2AJYU-8BC0001 ".

#### **Manual Information to the End User**

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

#### **Antennas**

Antenna Specification are as follows:

Type: External Antenna

Gain:

GSM/GPRS/EDGE 850: 2.02 dBi

GSM/GPRS/EDGE 1900: 2.12 dBi

WCDMA/HSDPA/HSUPA Band II: 2.12 dBi

WCDMA/HSDPA/HSUPA Band V: 2.02 dBi

LTE FDD Band 2: 2.12 dBi

LTE FDD Band 4: 3.12 dBi

LTE FDD Band 5: 2.02 dBi

LTE FDD Band 7: 3.20 dBi

LTE TDD Band 38: 1.64 dBi

LTE TDD Band 41: 3.20 dBi

LTE FDD Band 66: 3.12 dBi