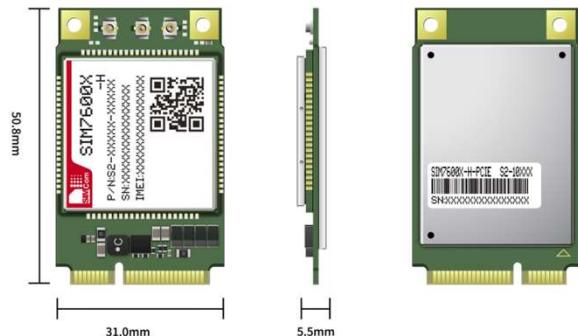


V: 2020.02

SIM7600-H-PCIE Series

SIMCom LTE Cat 4 Module



Product Description

The SIM7600-H-PCIE series is the LTE Cat 4 module which supports wireless communication modes of LTE-TDD/LTE-FDD/HSPA+/GSM/GPRS/EDGE etc. It supports maximum 150Mbps downlink rate and 50Mbps uplink rate.

The SIM7600-H-PCIE series adopts mini PCIE form factor and consists of a SIM7600-H series module and a mini PCIE adapter board. It is easy for customers to integrate.

The SIM7600-H-PCIE series integrates multiple satellite high accuracy positioning GNSS systems, with 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 SIM7500/SIM7600 series modules. Meanwhile the SIM7600-H-PCIE series integrates main industrial standard interfaces, with powerful expansibility, including abundant interfaces such as UART, USB, GPIO, which is suitable for main IoT applications such as telematics, surveillance devices, CPE, industrial routers, and remote diagnostics etc.

Key Benefits

- ◆ Mini-PCIE interface with strong compatibility
- ◆ Suitable for LTE, UMTS and GSM networks with global coverage
- ◆ Abundant software functions: FOTA, LBS, TLS, VoLTE
- ◆ Multi-constellation GNSS receiver support
- ◆ AT commands of the SIM7600-H-PCIE series are compatible with the SIM7500/SIM7600 series modules

Product	SIM7600A-H-PCIE	SIM7600V-H-PCIE	SIM7600SA-H-PCIE	SIM7600JC-H-PCIE
Form Factor	Mini PCIE	Mini PCIE	Mini PCIE	Mini PCIE
Dimensions(mm)	50.8*31*5.35	50.8*31*5.35	50.8*31*5.35	50.8*31*5.35
Frequency Bands	LTE-FDD B2/B4/B12 LTE-TDD WCDMA GSM	B2/B4/B5/B13 B40 B1/B2/B5/B8 850/900/1800/1900MHz	B1/B2/B3/B4/B5/B7/B8/B20/ B28/B66 B40 B1/B2/B5/B8 850/900/1800/1900MHz	B1/B3/B8/B18/B19/B26
GNSS	○	○	○	○
Temperature	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Electrical Features				
Supply Voltage(V)	3.0~ 3.6	3.0~ 3.6	3.0~ 3.6	3.0~ 3.6
Power Consumption (mA)	LTE WCDMA, DRX=9 GSM,BS_PA _MFRMS=2	2.3 3.3	2.3 3.3	2.3 2.8
Data Transfer				
LTE(Mbps)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)
HSPA+(Mbps)	42(DL)/5.76(UL)		42(DL)/5.76(UL)	
WCDMA(Kbps)	384(DL)/384(UL)		384(DL)/384(UL)	
GPRS/EDGE(Kbps)			236.8(DL)/236.8(UL)	
Software Features				
Protocol	TCP/IP/IPv4/IPv6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS	TCP/IP/IPv4/IPv6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS	TCP/IP/IPv4/IPv6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS	TCP/IP/IPv4/IPv6/ Multi-PDP/FTP/FTPS/ HTTP/ HTTPS/DNS
TLS	●	●	●	●
File System	●	●	●	●
Audio Record/Play	○	○	○	○
TTS	○	○	○	○
DTMF	○	○	○	○
LBS	●	●	●	●
FOTA	●	●	●	●
Jamming Detection	●	●	●	●
Android RIL	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0
USB Driver	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android
WWAN (RNDIS)	●	●	●	●
ECM	●	●	●	●
MBIM	Win8/Win10	Win8/Win10	Win8/Win10	Win8/Win10
NDIS	Linux/Windows 7/8/10	Linux/Windows 7/8/10	Linux/Windows 7/8/10	Linux/Windows 7/8/10
Open Linux	○	○	○	○
Firmware Upgrade	USB/FOTA	USB/FOTA	USB/FOTA	USB/FOTA
Interfaces				
SIM Card	1.8V/3.0V	1.8V/3.0V	1.8V/3.0V	1.8V/3.0V
UART	●	●	●	●
USB	●	●	●	●
PCM	○	○	○	○
Analog Audio	○	○	○	○
Embedded SIM card socket	○	○	○	○
Diversity Receiver	●	●	●	●
Certification				
Regulatory	FCC/PTCRB/IC/RoHS/ REACH	FCC/GCF/RoHS/REACH	CE-RED/ACMA/FCC/NCC/ RoHS/REACH/Anatel	Telec/JATE/RoHS/REACH
Carrier	AT&T	Verizon		Docomo/Softbank

●: support ○: optional * : on going

Product	SIM7600E-H-PCIE	SIM7600E-H1C-PCIE	SIM7600NA-H-PCIE	SIM7600G-H-PCIE
Form Factor	Mini PCIE	Mini PCIE	Mini PCIE	Mini PCIE
Dimensions(mm)	50.8*31*5.35	50.8*31*5.35	50.8*31*5.35	50.8*31*5.35
Frequency Bands	LTE-FDD B1/B3/B5/B7/B8/B20 LTE-TDD B38/B40/B41 WCDMA B1/B5/B8 GSM 900/1800MHz	B1/B3/B5/B7/B8/B20 B38/B40/B41 B1/B5/B8 900/1800MHz	B2/B4/B5/B12/B13/B14/B25/ B26/B66/B71 B41	B1/B2/B3/B4/B5/B7/B8/B12/B13/ B18/B19/B20/B25/B26/B28/B66 B34/B38/B39/B40/B41 B1/B2/B4/B5/B6/B8/B19 850/900/1800/1900MHz
GNSS	○	○	○	○
Temperature	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Electrical Features				
Supply Voltage(V)	3.0~ 3.6	3.0~ 3.6	3.0~ 3.6	3.0~ 3.6
Power Consumption (mA)	LTE 2.3 WCDMA, DRX=9 3.3 GSM_BS_PA _MFRMS=2 2.8	2.3 3.3 2.8	2.3 3.3 2.8	2.3 3.3 2.8
Data Transfer				
LTE(Mbps)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)
HSPA+(Mbps)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)
WCDMA(Kbps)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)
GPRS/EDGE(Kbps)	236.8(DL)/236.8(UL)	236.8(DL)/236.8(UL)	236.8(DL)/236.8(UL)	236.8(DL)/236.8(UL)
Software Features				
Protocol	TCP/IP/IPv4/IPv6/ Multi-PDP/FTP/FTPS/ HTTP/ HTTPS/DNS	TCP/IP/IPv4/IPv6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS	TCP/IP/IPv4/IPv6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS	TCP/IP/IPv4/IPv6/ Multi-PDP/FTP/FTPS/HTTP/ HTTPS/DNS
TLS	●	●	●	●
File System	●	●	●	●
Audio Record/Play	○	○	○	○
TTS	○	○	○	○
DTMF	○	○	○	○
LBS	●	●	●	●
FOTA	●	●	●	●
Jamming Detection	●	●	●	●
Android RIL	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0	Android 5.0/6.0/7.0/8.0/9.0
USB Driver	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android	Microsoft Windows 7/8/10 Linux/Android
WWAN (RNDIS)	●	●	●	●
ECM	●	●	●	●
MBIM	Win8/Win10	Win8/Win10	Win8/Win10	Win8/Win10
NDIS	Linux/Windows 7/8/10	Linux/Windows 7/8/10	Linux/Windows 7/8/10	Linux/Windows 7/8/10
Open Linux	○	○	○	○
Firmware Upgrade	USB/FOTA	USB	USB/FOTA	USB/FOTA
Interfaces				
SIM Card	1.8V/3.0V	1.8V/3.0V	1.8V/3.0V	1.8V/3.0V
UART	●	●	●	●
USB	●	●	●	●
PCM	○	○	○	○
Analog Audio	○	○	○	○
Embedded SIM card socket	○	○	○	○
Diversity Receiver	●	○	●	●
Certification				
Regulatory	CE-RED/RoHS/REACH/ IMDA/GCF	CE-RED/RoHS/REACH	FCC*/IC*/PTCRB*/GCF*/ RoHS*/REACH*	CE-RED/FCC/IC/RCM/RoHS*/ REACH*
Carrier	DTAG/Vodafone		AT&T*/Verizon*/Sprint*/ T-mobile*	

●: support ○: optional * : on going