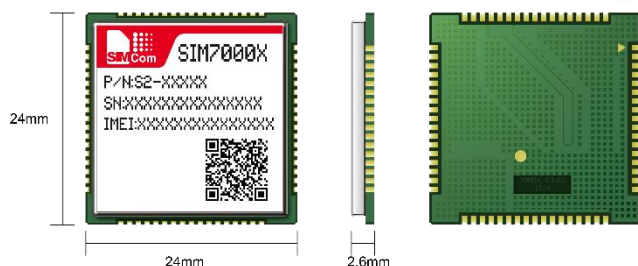


SIM7000 Series

SIMCom LPWA Module



Product Description

The SIM7000 series is the LPWA module which supports wireless communication modes of Cat-M/ Cat-NB/GPRS/EDGE.

The SIM7000 series adopts LCC form factor and has a compact size of 24mm*24mm which makes it ideal for compact products design.

The SIM7000 series has powerful expansibility with abundant interfaces including UART, GPIO, PCM, I2C etc. The SIM7000 series is designed for applications that need low power consumption, low throughput data communication in a variety of radio propagation conditions. Due to the unique combination of performance, security and flexibility, this module is ideally suited for M2M applications, such as metering, asset tracking, remote monitoring, E-health etc.

Global-Band

FOTA

LCC

LWM2M/
MQTT

Compact
Size

VoLTE

TCP/UDP

PSM/eDRX

HTTP/SSL

Key Benefits

- ◆ With Power Saving Mode(PSM) and Extended Discontinuous Reception(eDRX), the SIM7000 series can extend battery life to 10 years
- ◆ SIM7000 series provides deeper coverage enhancement compared to GSM
- ◆ The form factor and AT commands of the SIM7000 series are compatible with SIM900 and SIM800F

Product	SIM7000G	SIM7000E	SIM7000JC	
Form factor	LCC, 68PIN	LCC, 68PIN	LCC, 68PIN	
Dimensions(mm)	24*24*2.6	24*24*2.6	24*24*2.6	
Frequency Bands	Cat-M	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B26/B28/B39	B3/B5/B8/B20/B28	B1/B3/B5/B8/B18/B19/B26
	Cat-NB	B1/B2/B3/B5/B8/B12/B13/B17/B18/B19/B20/B26/B28	B3/B5/B8/B20/B28	B1/B3/B5/B8/B18/B19/B26
	GSM	850/900/1800/1900MHz	900/1800MHz	
GNSS	o	o	o	
Temperature	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	
Electrical Features				
Supply Voltage Range(V)	3.0~ 4.3	3.0~ 4.3	3.0~ 4.3	
Power Consumption	Power Off(μA)	7	7	7
	PSM(μA)	9	9	9
	Sleep(mA)	1	1	1
	Idle(mA)	11	11	11
Data Transfer				
Cat-M(Kbps)	300(DL)/375(UL)	300(DL)/375(UL)	300(DL)/375(UL)	
Cat-NB(Kbps)	34(DL)/66(UL)	34(DL)/66(UL)	34(DL)/66(UL)	
EGPRS(Kbps)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)	
Software Features				
Protocol	TCP/UDP/LWM2M/COAP/MQTT/FTP/HTTP/TLS/DTLS/NTP	TCP/UDP/LWM2M/COAP/MQTT/FTP/HTTP/TLS/DTLS/NTP	TCP/UDP/LWM2M/COAP/MQTT/FTP/HTTP/TLS/DTLS/NTP	
FOTA	●	●	●	
Embedded AT	●	●	●	
Firmware Upgrade	USB/FOTA	USB/FOTA	USB/FOTA	
Interfaces				
SIM Card	1.8V/3.0V	1.8V/3.0V	1.8V/3.0V	
UART	●	●	●	
USB	●	●	●	
PCM	●	●	●	
ADC	●	●	●	
I2C	●	●	●	
Certification				
Regulatory	RoHS/REACH/RCM/CE(RED)/GCF/FCC/IC/UKCA/OCD(Anatel)	RoHS/REACH/KC/RCM/CE(RED)/GCF	RoHS/REACH/JATE/Telec	
Carrier	Deutsche Telekom	KT/LGU*/IMDA/TELSTRA/SPARK/Deutsche Telekom/Vodafone*	Docomo/KDDI	

● : support o : optional * : on going