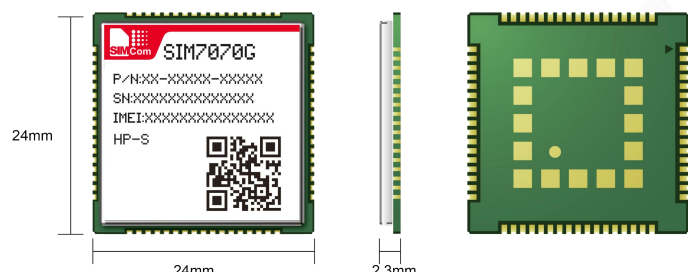


SIM7070G-HP-S

Satellite Communication Module



Product Description

SIM7070G-HP-S is a 3GPP NTN (non-terrestrial network) satellite communication module which supports 3GPP Rel-17 (IoT-NTN) at L-band (B255) and S-band (B256/B23) frequencies for satellite communications. Which supports wireless communication modes of Cat-M/Cat-NB2.

Employ satellite connectivity solutions that work with any satellite network globally using the 3GPP Rel.17 5G IoT-NTN protocol.

SIM7070G-HP-S adopts LCC+LGA form factor and has a compact size of 24mm*24mm which makes it ideal for compact products design.

SIM7070G-HP-S has powerful expansibility with abundant interfaces including UART, GPIO, PCM, SPI, I²C etc. The SIM7070G-HP-S is designed for applications that need low latency, 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.



Key Benefits

- ◆ NTN Satellite communication module
- ◆ IoT-NTN/ LTE Cat-M/NB2 module with Ultra-low power consumption
- ◆ With Power Saving Mode(PSM) and Extended Discontinuous Reception(eDRX), SIM7070G-HP-S can extend battery life up to 10 years
- ◆ SIM7070G-HP-S provides deeper coverage enhancement compared to GSM
- ◆ The form factor and AT commands of SIM7070G-HP-S are compatible with SIM7000X/SIM800F/SIM900

Product		SIM7070G-HP-S
Region		Europe/NorthAmerica
Form Factor		LCC, 68PIN
Dimensions(mm)		24*24*2.3
Frequency Bands	Cat-M	B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25/B26/B27/B28/B66
	Cat-NB	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66
	IoT-NTN	S-Band: B23/ B256 L- Band: B255
LTE RF Power Class		Class 3 (Typ. 23dbm)
GNSS		GPS/ GLONASS/ BeiDou/ Galileo/ QZSS
Temperature		-40°C ~ +85°C
Electrical Features		
Supply Voltage Range(V)		3.0~ 4.6 , typical 3.8
Power Consumption	@PSM(uA)	3.8uA @3.8V
	@Sleep(mA)	0.45mA @3.8V
	@Idle(mA)	13.7mA @3.8V
Data Transfer		
IoT-NTN Data Rate(kbps)		250(DL)/200(UL)
Cat-M Data Rate(Kbps)		589(DL)/1119(UL)
Cat-NB Data Rate(Kbps)		127(DL)/158.5(UL)
Software Features		
Protocol		TCP/UDP/HTTP/HTTPS/FTP/TLS/DTLS/PING/LWM2M/COAP/MQTT
FOTA		●
Embedded AT		●
Firmware Upgrade		USB/FOTA
Interfaces		
SIM Card		1.8V
UART		●
USB		●
PCM/I2S		●
ADC		●
SPI		●
I ² C		●
Embedded SIM		○
Certification		
Regulatory		RoHS/REACH/KC/RCM/CE/GCF
Carrier		Telstra*/GU+*
Satellite		Skylo

●: support ○: optional *: means under developing/on-going/planning