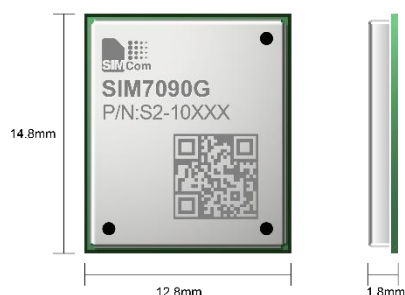


V: 2020.03

SIM7090G

SIMCom LPWA Module

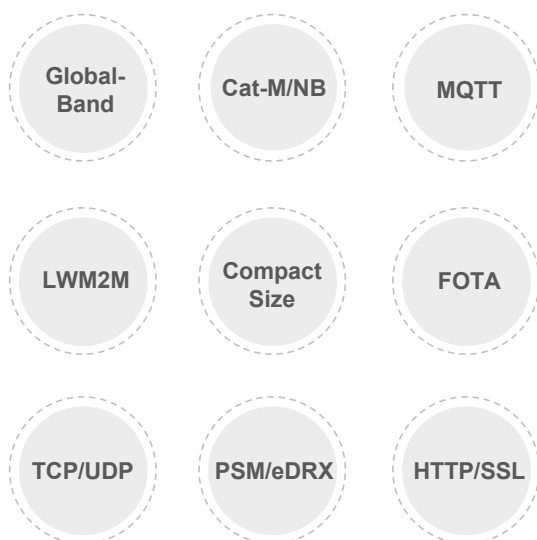


Product Description

SIM7090 is the LPWA module which supports wireless communication modes of Cat-M/Cat-NB.

SIM7090 adopts LGA form factor and has a compact size of 14.8mm*12.8mm which makes it ideal for compact products design.

SIM7090 has powerful expansibility with abundant interfaces including UART, GPIO, PCM, SPI, I2C etc. The SIM7090 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

- ◆ With Power Saving Mode(PSM) and Extended Discontinuous Reception(eDRX), SIM7090G can extend battery life up to 10 years
- ◆ SIM7090 provides deeper coverage enhancement compared to GSM
- ◆ Ultra compact size for wearable tracker application

General Features

Frequency Bands	Cat-M B1/B2/B3/B4/B5/B8/B12/B13/B14/ B18/B19/B20/B25/B26/B27/B28/ B66/B85
	Cat-NB B1/B2/B3/B4/B5/B8/B12/B13/B18/ B19/B20/B25/B26/B28/B66/B71/B85
LTE RF Power Class	Class 5 (Typ. 21dbm)
Supply voltage range	2.7V ~ 4.8V
Control Via AT Commands	
Operation temperature	-40°C ~ +85°C
Dimensions	14.8*12.8*1.8mm
Weight	0.8g±0.2

Data

Cat-M	Uplink 1119Kbps
	Downlink 589Kbps
Cat-NB	Uplink 158.5Kbps
	Downlink 127Kbps

Power Consumption

PSM	3.2 uA
Sleep	0.8 mA
Idle	10 mA

Other Features

TCP/UDP/HTTP/HTTPS/FTP
TLS/DTLS/PING/LWM2M/COAP/MQTT
AYLA Cloud
Firmware update via USB
FOTA
EAT

Interfaces

UART
SIM (1.8V)
PCM/I2S
SPI
I2C
GPIO
ADC
USB

Certifications

FCC/IC/CE/RCM/JATE/TELEC
AT&T/Verizon*/T-Mobile/GCF/PTCRB
RoHS/REACH

Note

*: on going