

SIM7020E

NB-IoT Module



Multi-Band NB-IoT

LCC

LWM2M/CO Compact FOTA
AP Size

TCP/UDP PSM/eDRX HTTP/SSL

Product Description

The SIM7020E is Multi-Band NB-IoT module solution in a SMT type .

It has strong extension capability with rich interfaces including UART, GPIO etc. The module provides much flexibility and ease of integration for customer's application.

The package of SIM7020E is compatible with SIM800C. This also maximizes the investments of customers, and enables a short time-to-market.

It 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 Save Mode(PSM) and Extended
 Discontinuous Reception(eDRX), SIM7020E can extend
 battery life to 10 years
- SIM7020E provides deeper coverage enhancement compared to GSM
- The package and AT commands of SIM7020E mostly are compatible with SIM800C.

Smart machine Smart decision

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General Features

LTE-FDD: B1/B3/B5/B8/B20/B28
Control Via AT Commands
Supply voltage range: 2.1V-3.6V
Operation temperature: -40°C to +85°C
Dimensions: 17.6 X 15.7 X 2.3mm

Weight: $1.3g \pm 0.2g$

Data

Uplink: 62.5Kbps Downlink:26.15Kbps

SMS

Text and PDU mode

Consumption

PSM: 3.4 uA sleep: 0.4mA Idle: 5.6mA

eDRX: 30uA (eDRX=655.36s)

Other Features

Firmware update via UART
TCP/UDP
HTTP/HTTPS/TLS/DTLS/DNS/NTP/PING
LWM2M/COAP/MQTT/MQTTS
Ayla Cloud/Ali Cloud
FOTA
EAT

Interfaces

UART
SIM card (1.8V/3V)
Embedded SIM IC (Optional)
GPIO
ADC
Netlight
PSM_EINT
Reset
Powerkey

Certifications

CE RoHS / REACH GCF*

DTAG*/VDF*

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^{*} In development