## Neoway,有方

# N20

NB-IoT/eMTC/ EDGE Module
Ultra-low power consumption





Ultra-low power consumption



Compact Size





Operating temperature -40 to +85°C



Neoway enhanced

N20

N20 is a high performance, low power consumption NB-IoT(Cat NB1)/eMTC(Cat M1)/ EDGE module based on Qualcomm platform. Its dimensions are 25.8 x 23.8 x 2.8 mm which makes it perfectly suited for industrial applications with strict size requirement. N20 supports GNSS and various hardware interfaces, and is easy to develop. It is well applicable to IoT communications devices requiring low speed and low power consumption.

#### **Features**

Frequency Bands

US:

eMTC: B2, B4, B12, B13

CN:

NB-IoT: B1, B3, B5, B8 eMTC: B1, B3, B5, B8, B39 GSM/GPRS/EDGE: 900/1800 MHz

CA:

NB-IoT/eMTC: B3, B5, B8

EU:

NB-IoT/eMTC: B3, B8, B20 GSM/GPRS/EDGE: 900/1800 MHz

AP\*:

NB-IoT/eMTC: B3, 28

GSM/GPRS/EDGE: 900/1800 MHz

JP\*:

NB-IoT/eMTC: B1, B3, B8, B18, B19, B26 Operating temperature: -40°C to +85°C

Supply voltage:

3.3 to 4.3 V (DC), 3.8 V recommended

Idle current: TBD

Package: LCC 68-pin

Dimensions: 25.8 x 23.8 x 2.8 mm

Control via AT commands:

3GPP Rel-13

Neoway enhanced AT commands

Firmware upgrade Via USB

- CMUX
- SMS
- Various hardware interfaces
- GNSS (optional): GPS, GLONASS, BDS
- \* means in developing

### **Specifications**

Data:

LTE eMTC

Max. 375Kbps(DL)
Max. 300Kbps(UL)

NB-loT

Max. 32Kbps(DL)
Max. 72Kbps(UL)

**EDGE** 

Max. 236.8Kbps(DL/UL)

**GPRS** 

Max. 85.6Kbps(DL/UL)

SMS:

TEXT/PDU

Point to Point/Cell Broadcast

### Interfaces

- Power, On/Off, Reset
- USB 2.0 HS
- 2 UART
- 1.8 V/ 2.85 V USIM interface
- Antenna:

pads for Cellular and GNSS

- 4 GPIO
- 2 ADC
- SDIO
- I2C
- SPI
- PCM

#### Highlights

Multiple modes:

NB-IoT/eMTC/EDGE

- OpenLinux based on A7 processor
- Integrated GNSS (optional)
- Low power consumption
- Deep coverage
- Support VoLTE (only for eMTC)
- LCC package, easy to solder







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