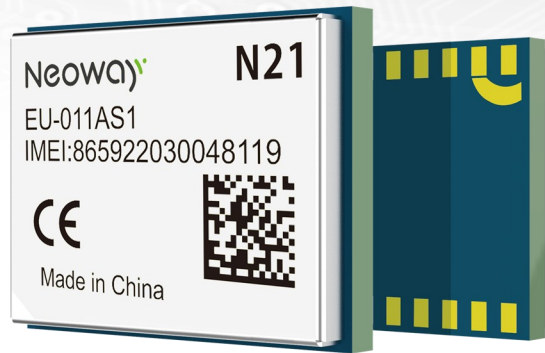


N21 series

NB-IoT module



Low power consumption

< 4uA @PSM



Pin2pin compatible

Compatible with Neoway N11 series
2G modules



Various network protocols

3GPP protocol stack Release 13 compliant
Support TCP/IP/UDP, IoT protocols



LGA package, small size

Reduce product area
Easy to layout



Technical support

Reference designs, evaluation kits
Timely email, call, and field support

N21 is a low-power consumption and high-performance NB-IoT module. Its dimensions are 13.8 x 18 x 2.5 mm. Its pins are packaged in LGA, which reduces product area.

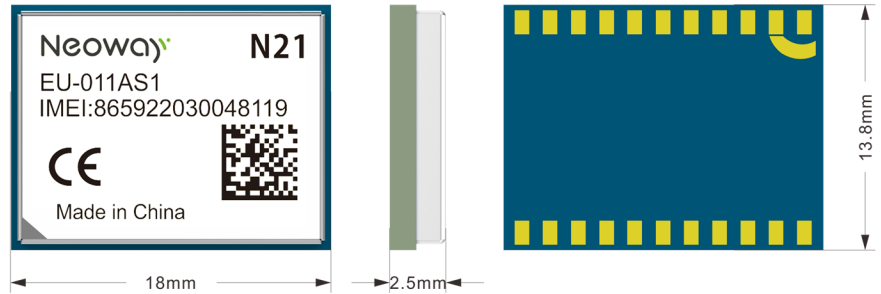
N21 series can be used in most regions including Asia, Europe, Australia and other areas where NB-IoT networks are deployed.

N21 integrates industrial UART interfaces and supports various network protocols, such as CoAP/UDP/TCP/IP/MQTT.

With low power consumption, ultra wide operating temperature range, and excellent RF performance, N21 is the optimal option for energy metering, smart lock, security, environmental monitoring, etc.

N21 series

NB-IoT module



Features

| | | |
|-----------------------|-----------------------------|-----------------|
| Bands | CN | B3, B5, B8 |
| | EU | B3, B8, B20 |
| | AP | B3, B5, B8, B28 |
| Supply voltage | 3.1 to 4.3 V(DC), Typ: 3.6V | |
| Power consumption | < 4uA @ PSM | |
| | < 2mA @ Idle mode | |
| Operating temperature | -30°C to +75°C | |
| Dimensions | 13.8 x 18 x 2.5 mm | |
| Package | LGA 22-pin | |
| Weight | Approx. 1.3g | |
| AT commands | 3GPP Rel-13 | |
| | Neoway enhanced AT Commands | |

Specifications

| | |
|-------------------|---|
| Data rate | Max. 32Kbps (DL) / 72Kbps (UL) |
| SMS | TEXT/PDU |
| | Point to Point/Cell Broadcast |
| Network protocols | CoAP, UDP, MQTT, TCP/IP, PPP, FTP, HTTP/HTTPS |
| Firmware upgrade | Via UART |

Interfaces

| | |
|-----------|---------------------------------|
| Antenna | Cellular |
| UART | 2 UART |
| USIM | 1.8V/3.0V |
| NET_LIGHT | Network status |
| Others | PWRKEY_N, STATUS, VCCIO, WAKEUP |

Enhanced Features

- Support software upgradeable to 3GPP Release 14 features
- Support mode: stand-alone, in-band, guard –band
- Support CP-CIoT and UP-CIoT
- Support the NPUSCH: format1 and format2

Certification Approvals

CCC, SRRC, CTA, CE*, GCF*, RoHS*,

* indicates in development