NEOWAY N75

Ideal Solution for IoT Applications

- LTE Cat 4 module optimized for M2M and IoT applications
- DTMF*. eCall* and DFOTA*
- Used in most regions including North-America, Europe, Japan where LTE networks are deployed
- An optimal option for energy metering, telematics, industrial router, industrial PAD, video surveillance, environmental monitoring, etc.



Chipset

Qualcomm MDM9x07



Operating temperature

-40°C to +85°C, industrial-grade



Various protocols

TCP/IP/UDP/MQTT IoT protocols



30.0 mm × 28.0 mm × 2.8 mm Reduce product size





Technical support

Reference designs, evaluation kits Timely support via emails, calls, and IM Field support



N75 is an LTE Cat 4 module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel. 11 LTE technology, it delivers 150Mbps downlink and 50Mbps uplink data rates.

N75 supports Qualcomm® IZat™ location technology Gen8C Lite (GPS, GLONASS, BDS, Galileo and QZSS). The integrated GNSS greatly simplifies product design, and provides quicker, more accurate and more reliable position fix.

This module has low power consumption, ultra wide operating temperature range, and excellent RF performance. Integrating various Internet protocols, industry-standard interfaces, and abundant functionalities (USB serial drivers for Windows 7/8/8.1/10, Linux, Android), N75 is an optimal option for energy metering, telematics, industrial router, industrial PAD, video surveillance, environmental monitoring, etc.

N75 series can be used in most regions including North-America, Europe, Japan where LTE networks are deployed. It also supports EDGE and HSPA+ networks for application in areas not covered by LTE networks.

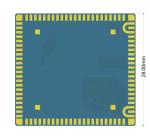




N75 LTE Cat 4

Ideal Solution for IoT Applications





Specifications

LTE FDD: B2/B4/B5/B7/B12/B13/B25/B26/B66/

N75-NA **B71**

(North America) UMTS: B2/B4/B5

GSM/GPRS: 850/1900MHz

LTE FDD: B2/B4/B5/B7/B12/B13/B14/B25/B26/

N75-NF B66/B71

(North America) UMTS: B2/B4/B5

GSM/GPRS: 850/1900MHz

N75-A LTE FDD: B2/B4/B5/B12/B66

(AT&T) UMTS: B2/B4/B5

LTE FDD: B1/B3/B5/B7/B8/B20/B28

N75-EA LTE TDD: B38/B40/B41

(EMEA) UMTS: B1/B5/B8

GSM/EGPRS: 900/1800MHz

LTE FDD: B1/B2/B3/B4/B5/B7/B8/B10/B28/B66

N75-LA LTE TDD: B38/B40/B41

UMTS: B1/B2/B4/B5/B8 (Latin America)

GSM/GPRS: 850/900/1800/1900MHz

LTE FDD: B1/B3/B8/B18/B19/B26/B28 N75-JP

LTE TDD: B41

(Japan) UMTS: B1/B6/B8/B19

Supply voltage 3.3 to 4.3 V(DC), Typ.: 3.8V

< 4mA @ Sleep Power consumption < 15mA @ Idle mode

Operating temperature

-40°C to +85°C

 $30.0 \text{mm} \times 28.0 \text{mm} \times 2.8 \text{mm} (\pm 0.1 \text{mm})$ **Dimensions**

Package 100-pin LGA, 1.0-mm pitch

Weight $5.1g \pm 0.2g$

3GPP TS 27.007, 27.005 AT commands

Neoway enhanced AT Commands

Interfaces

POWER, PWRKEY N, RESET N USB2.0, UART

PCM, I2C, SPI* **SDIO3.0**

ADC

1.8V/3.0V USIM interface

NET LIGHT

Cellular and GNSS antenna interfaces

Features

protocols

LTE: Max. 150Mbps (DL)/50Mbps (UL) UMTS: Max. 42Mbps (DL)/5.76Mbps (UL) Data rate

EDGE: Max. 236.8bps (DL/UL)

TEXT/PDU SMS

Point to Point/Cell Broadcast

TCP/UDP/MQTT/PPP/NTP/FTP /HTTP/HTTPS/ Network

SSL/TLS

Firmware Via USB or FOTA

upgrade

Windows 7/8/8.1/10

USB Driver Linux 2.6~4.4

Android 4.x/5.x/6.x/7.x/8.x

Android 4.x/5.x/6.x/7.x/8.x RIL Driver

Enhanced Features

SDIO Interface for WLAN Function (Optional)

SDIO Interface for SD/TF Card Function (Optional) PCM/I2C Interface for Voice Function (Optional)

Dual-tone multi-frequency signaling (DTMF)

USIM Card Detection

Differential Firmware Over-the-Air (DFOTA)

GNSS: (not supported in N75-NF)

- GPS, GLONASS, BDS, Galileo and QZSS

- Receiver Type

GPS L1/BDS B1/GLONASS G1/Galileo E1/QZSS L1

- TTFF (Open air with GPS only)

Cold starts: <35s Hot starts: <2s

- Sensitivity:

Acquisition: -149dbm(GPS)/-148.5dbm(GLONASS) Tracking: -158.7dbm(GPS)/-158.2dbm(GLONASS)

- Position Accuracy (Open air): <3m(CEP50)

Certification Approvals

CE-R*, RoHS*, FCC, PTCRB, AT&T, T-Mobile*, GCF*, Verizon*, JATE*, TELEC*

* indicates in development

