

4g module 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

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.



Operating temperature

-40°C to +85°C, industrial-grade

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.



Various protocols

TCP/IP/UDP/MQTT IoT protocols

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.



Compact package

LGA package
30.0 mm × 28.0 mm × 2.8 mm
Reduce product size

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.

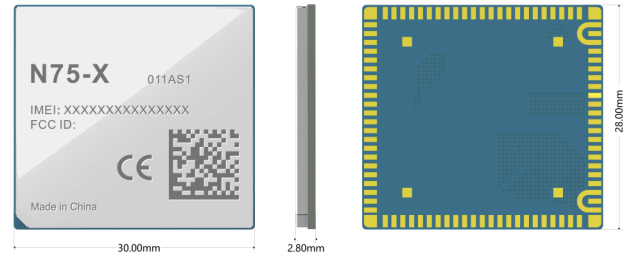


Technical support

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



N75 LTE Cat 4 Ideal Solution for IoT Applications



Specifications

N75-NA (North America)	LTE FDD: B2/B4/B5/B7/B12/B13/B25/B26/B66/B71 UMTS: B2/B4/B5 GSM/GPRS: 850/1900MHz
N75-NF (North America)	LTE FDD: B2/B4/B5/B7/B12/B13/B14/B25/B26/B66/B71 UMTS: B2/B4/B5 GSM/GPRS: 850/1900MHz
N75-A (AT&T)	LTE FDD: B2/B4/B5/B12/B66 UMTS: B2/B4/B5
N75-EA (EMEA)	LTE FDD: B1/B3/B5/B7/B8/B20/B28 LTE TDD: B38/B40/B41 UMTS: B1/B5/B8 GSM/EGPRS: 900/1800MHz
N75-LA (Latin America)	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B10/B28/B66 LTE TDD: B38/B40/B41 UMTS: B1/B2/B4/B5/B8 GSM/GPRS: 850/900/1800/1900MHz
N75-JP (Japan)	LTE FDD: B1/B3/B8/B18/B19/B26/B28 LTE TDD: B41 UMTS: B1/B6/B8/B19
Supply voltage	3.3 to 4.3 V(DC), Typ.: 3.8V
Power consumption	< 4mA @ Sleep < 15mA @ Idle mode
Operating temperature	-40°C to +85°C
Dimensions	30.0mm x 28.0mm x 2.8mm(± 0.1mm)
Package	100-pin LGA, 1.0-mm pitch
Weight	5.1g± 0.2g
AT commands	3GPP TS 27.007, 27.005 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

Data rate	LTE: Max. 150Mbps (DL)/50Mbps (UL) UMTS: Max. 42Mbps (DL)/5.76Mbps (UL) EDGE: Max. 236.8bps (DL/UL)
SMS	TEXT/PDU Point to Point/Cell Broadcast
Network protocols	TCP/UDP/MQTT/PPP/NTP/FTP /HTTP/HTTPS/SSL/TLS
Firmware upgrade	Via USB or FOTA
USB Driver	Windows 7/8/8.1/10 Linux 2.6~4.4 Android 4.x/5.x/6.x/7.x/8.x
RIL Driver	Android 4.x/5.x/6.x/7.x/8.x

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