NEOWAY N58

Ideal Solution for IoT Applications



- Optimized for M2M and IoT applications
- GNSS, Audio, Bluetooth4.2, Camera, LCD, and FOTA
- Applicable to smart metering, sharing equipment, tracker, environmental monitoring, etc.
- Used in most regions including China, EMEA, Latin America and SEA where LTE networks are deployed

Chipset

Unisoc 8910DM

Operating temperature

-40°C to +85°C, industrial-grade

Various protocols

TCP/IP/UDP/MQTT IoT protocols

Compact package

LCC+LGA package
30.0 mm × 28.0 mm × 2.6 mm
Reduce product size

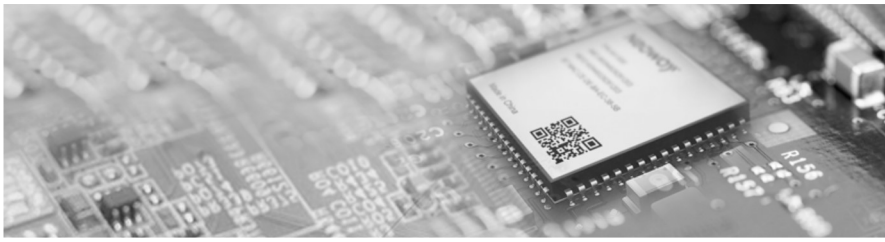
Technical support

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

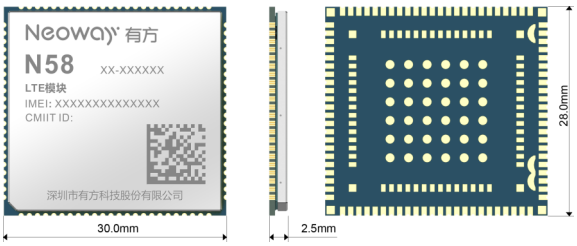
N58 is an LTE Cat 1 module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel.13 LTE technology, it delivers 10Mbps downlink and 5Mbps uplink data rates.

This module has excellent RF performance, and it supports low power consumption and ultra-wide operating temperature range. N58 integrates various network protocols and provides industry-standard interfaces. With abundant functionalities and USB serial drivers for Windows 7/8/8.1/10, Linux, and Android, N58 is an optimal option for energy metering, telematics, industrial router, industrial PAD, video surveillance, environmental monitoring, etc.

The N58 series can be used in most regions including China, EMEA, Latin America and SEA where LTE networks are deployed. It also supports GPRS networks for application in areas not covered by LTE networks.



N58 LTE Cat1
Ideal Solution for IoT Applications



Specifications

N58-CA	LTE Cat1: B1, B3, B5, B8, B34, B39, B40, B41 GSM/GPRS: 900/1800 MHz
N58-EA	LTE Cat1: B1, B3, B5, B7, B8, B20, B28, B38, B40, B41 GSM/GPRS: 900/1800 MHz
N58-LA	LTE Cat1: B1, B2, B3, B4, B5, B7, B8, B28, B66, B38, B40, B41 GSM/GPRS: 850/900/18001900 MHz
Supply voltage	3.4 to 4.2 V(DC), Typ.: 3.8V
Operating temperature	-40°C to +85°C
Dimensions	30.0(±0.15)mm x28.0(±0.15)mm x2.6(±0.2)mm
Package	192-pin LCC+LGA
Power consumption	< 2.6 mA @Sleep mode < 15 mA @Idle mode
AT	3GPP TS 27.007, 27.005 Neoway enhanced AT commands
CPU	ARM Cortex A5, 500MHz
Memory	RAM: 128 Mb ROM: 64 Mb

GNSS Features

Receiving Bands:	GPS L1 C/A: 1574.397MHz -1576.443MHz BDS B1 C/A: 1559.052MHz -1563.144MHz
Receiver type	32 tracking / 32 acquisition-channel GNSS receiver
Data update rate	1 to 10Hz,Typ: 1Hz
Sensitivity (Typical)	Tracking: -160dbm Reacquisition: -154dbm Colding: -146dbm
TTFF@-130dbm	Cold start: 30s(Typ) Hot start: <1s
Accuracy	Position: <3m (CEP50)

Features

Data rate	LTE: CAT1, Max. 10Mbit/s (DL)/Max. 5Mbit/s(UL) GPRS: Max. 85.6 Kbit/s(DL) / Max. 85.6 Kbit/s(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

2G/4G antenna, 50Ω characteristic impedance
Three UART interfaces, one of which supports hardware flow control
Two USIM interfaces, compatible with 1.8V/3V USIM cards
One USB2.0 high-speed interface
One 10-bit ADC interface, detectable voltage ranging
One SPI interface
Four GPIOs with interrupt
One I2C interface
One set of 3*3 key pads
One audio input and one audio output
Dual-USIM-single-standby (Optional)
Firmware Over-the-Air (FOTA)
VoLTE
MCU software OTA*
Bluetooth 4.2 / BLE
Wi-Fi SCAN
OpenCPU

Certification Approvals

CCC, CTA, SRRC, CE-R*, FCC*, RoHS, Reach

*** indicates in development**

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