

NEOWAY N51

WCDMA module

Key Benefits

- WCDMA module optimized for M2M and IoT applications
- Most regions including South East Asia, Europe, Africa, where WCDMA networks are deployed
- Hardware compatible with N720/N75/N58/N720V5
- Based on UNISOC platform
- Optimal option for energy metering, video surveillance, environmental monitoring, etc.



Chipset

UNISOC SC7701



Operating temperature

-40°C to +85°C, industrial-grade



Various network protocols

Support TCP, UDP, MQTT, PPP, NTP, FTP, HTTP, HTTPS, SSL, TLS



LGA package, small size

Reduce product area
Excellent ESD performance



Technical support

Reference designs, evaluation kit
Timely support via emails, calls, and instant messages
Field support

Product Description

N51 is a series of WCDMA/HSDPA/HSUPA modules optimized specially for M2M and IoT applications. Adopting the 3GPP Rel.6 HSDPA technology, it delivers 7.2 Mbps downlink and 1.92 Mbps uplink data rates.

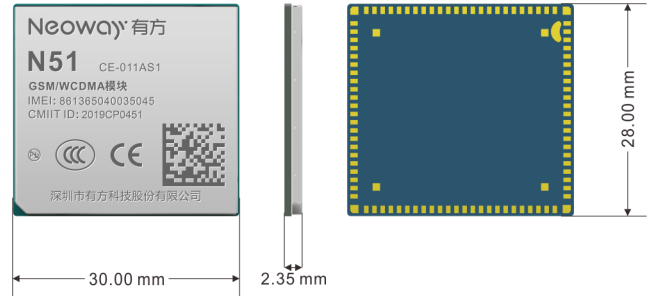
With low power consumption, ultra-wide operating temperature range, and excellent RF performance, N51 is an optimal option for energy metering, Telematics & Transport, etc. It integrates various Internet protocols, industry-standard interfaces and abundant functionalities and provides USB drivers for Windows 7/8/8.1/10.

N51 series can be used in most regions including India, South East Asia, Europe, Africa and other areas where WCDMA networks are deployed. It also supports EDGE networks for use in areas not covered by WCDMA networks.



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Specifications

N51-CE	UMTS: B1/B8 GSM/GPRS: 900/1800 MHz
N51-WW	UMTS: B1/B2/B5/B8 GSM/GPRS: 850/900/1800/1900 MHz
Supply voltage	3.3 to 4.3 V(DC), Type:3.8V
power consumption (Typical)	< 3.2mA @ Sleep < 35mA @ Idle mode
Operating temperature	-40°C to +85°C
Dimensions	30.0 (±0.15) mm x 28.0 (±0.15) mm x 2.45(±0.15)mm
Package	LGA 100-pin
Weight	4.6g±0. 2g
AT command	3GPP TS 27.007, 27.005 Neoway enhanced AT Commands

Certification Approvals

CE-R, RoHS, CCC, SRRC, CTA

Features

Data rate Max.	HSDPA/HSUPA: 7.2Mbps (DL)/ 1.92Mbps (UL) EDGE: 236.8kbps (DL/UL) GPRS: 85.6kbps (DL/UL)
SMS	TEXT/PDU Point to Point
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

Interfaces

- POWER, PWRKEY_N, RESET_N
- USB2.0 high speed interface
- UART interface
- Two USIM interfaces, compatible with 1.8V/3.0V USIM cards, 2mmx 2mm eSIM optional
- PCM, I2C, SPI
- Four GPIOs with interrupt
- One audio input and one audio output
- One 10-bit ADC interface, detectable voltage ranging from 0.1V to 1.7V