NimbeLink 4G LTE-M, NB-IoT

Airgain, a global leader in embedded cellular modem technology and asset tracking solutions, has introduced the NimbeLink NL-SW-LTE-QBG96 modem. This new NimbeLink modem offers LTE Category M/NB-IoT connectivity for global applications with fallback to 2G, as well as an integrated GPS/GNSS radio. The NL-SW-LTE-QBG96 is compatible with many of the world's LTE-M and NB-IoT networks.

NimbeLink cellular modems are designed to make cellular integration fast and easy. Exceptionally small, lowest power, and end-device certified, NimbeLink modems enable developers to quickly and reliably connect IoT products to cellular networks around the world. NimbeLink modems are backed by industry leading documentation and expert-level product support.

FEATURES

- No carrier certification required
- Small form-factor
- NimbeLink Standard Interface
- Flexible antenna options
- USB & UART serial interfaces
- Verizon eSIM
- Supports Power Save Mode
- RoHS compliant/Radio Equipment Directive

ADVANTAGES

- Global LTE coverage with 2G fallback
- Pin compatible with all NimbeLink modems
- GNSS support for GPS, GLONASS, Beidou/Compass, Galileo, QZSS
- Global hardware compatibility

PART NUMBER

	DESCRIPTION
NL-SW-LTE-QBG96	LTE-M, NB-IoT, 2G fallback, with GNSS

TARGET REGION

Global	
Compatible Carriers	AT&T, Orange, Telstra, Telus, Verizon, Vodafone

CELLULAR TECHNOLOGY

LTE Category	LTE-M, NB-IoT
LTE Frequency Bands	LTE-FDD: B1[2100], B2[1900] B3[1800], B4[1700], B5[850], B8[900], B12[700], B13[700], B18[850], B19[850], B20[800], B26[850], B28[700] | LTE-TDD: B39[1900] (LTE-M only)
3G Technology Supported	N/A
3G Frequency Band	N/A
2G Technology Supported	GSM, EDGE, GPRS
2G Frequency Band	GSM850, EGSM900, DCS1800, PCS1900

DATA SPEEDS

Download Rate and Upload Rate	Download: LTE-M: 375 Kbps | NB-IoT: 32 Kbps | GPRS: 107 Kbps | EDGE: 296 Kbps Upload: LTE-M: 375 Kbps | NB-IoT: 70 Kbps | GPRS: 85.6 Kbps | EDGE: 236.8 Kbps

HARDWARE

Form Factor	NimbeLink Interface
Dimensions	29mm x 33mm x 10.5mm
Weight	8 grams

INTERNET PROTOCOLS

Network Stack Support	Integrated TCP/IP, UDP/IP, HTTP/HTTPS, FTP/SFTP, SSL/TLS, IPv4/IPv6, NITZ, PING, MQTT, PPP Stacks
SMS	SMS supported

LOCATION

GNSS	GPS, GLONASS, Beidou/Compass, Galileo, QZSS

POWER SUPPLY

Supply Voltage	3.4V to 4.8V (3.8V nominal)
I/O Voltage	1.65V - 5.5V

Current Consumption	Average 130 mA	Peak 900 mA	Idle 19 mA	Sleep 680 uA

INTERFACES

Type	UART, USB (USB 2.0 compliant)
USB Driver Support	OS: Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Linux Drivers: PPP | QMI | AT Console
RF	Primary, SISO DL (U.FL)

SIM

Type	Integrated Verizon SIM, external 3FF SIM slot

APPROVALS

Regulatory Certifications	PTCRB, CE/RED, FCC, IC
Carrier	AT&T, Rogers (In-Progress), Telus, Verizon
Compliance	RoHS compliant

TEMPERATURE RANGE

Industrial Grade	-40°C to +85°C

SUPPORT AND WARRANTY

1 Year standard warranty

PATENTS

US 9,838,066

US 9,497,570

US D731,491