NimbeLink 4G LTE-M (CAT M1), NB-IoT (NB1, NB2)

Airgain, a global leader in embedded cellular modem technology and asset tracking solutions, has introduced the NimbeLink NL-SW-LTE-QBG95 modem. This new NimbeLink modem offers LTE-M (CAT M1) and NB-IoT (NB1, NB2) connectivity for global applications with fallback to 2G, at lower power than the BG96 processor. It utilizes the Qualcomm 9205 chipset and Quectel BG95-M3 module. The modem also includes an integrated GPS/GNSS radio. The NL-SW-LTE-QBG95 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 soldered down SIM and Micro-SIM 3FF slot
- Supports Power Save Mode and eDRX
- RoHS compliant/Radio Equipment Directive

ADVANTAGES

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

PART NUMBER

	DESCRIPTION
NL-SW-LTE-QBG95	LTE-M, NB1, NB2, 2G fallback, with GNSS

TECHNICAL SPECIFICATIONS

TARGET REGION	
Global	
Compatible Carriers	AT&T, Orange, Telstra, Telus, T-Mobile, Verizon, Vodafone, and more
CELLULAR TECHNOLOGY	
LTE Category	LTE-M (CAT M1), NB-IoT (NB1, NB2)
LTE Frequency Bands	LTE-FDD: B1[2100], B2[1900] B3[1800], B4[1700], B5[850], B8[900], B12[700], B13[700], B14[700], B17[700], B18[850], B19[850], B20[800], B25[1900], B26[850], B27[850], B28[700], B31[450], B66[1700], B71[600]
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 Max: LTE-M: 589 Kbps | NB-IoT: 136 Kbps | GPRS: 107 Kbps | EDGE: 296 Kbps Upload Max: LTE-M: 1.2 Mbps | NB-IoT: 150 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
SMS	SMS supported
LOCATION	
GNSS	GPS, GLONASS, Beidou, Galileo
POWER SUPPLY	
Supply Voltage	3.4V to 4.8V (3.8V nominal)
I/O Voltage	1.65V - 5.5V

Current Consumption	Average TBD mA | Peak TBD mA | Idle TBD mA | Sleep TBD uA
INTERFACES	
Type	UART, USB (USB 2.0 compliant)
USB Driver Support	OS: Windows 7/8/10, Windows CE 5/6/7, Linux 2.6/3.X/4.1-4.14, Android 4/5/6/7/8 Drivers: PPP | QMI | AT Console | RIL Driver
RF	Primary, SISO DL (U.FL)
SIM	
Type	Integrated Verizon SIM, additional 3FF SIM slot
APPROVALS	
Regulatory Certifications	PTCRB, CE/RED (In-Progress), FCC, IC
Carrier	AT&T, Rogers, Telus, Verizon, and more
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	