NimbeLink 4G LTE (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-TG1WWG modem. This NimbeLink modem offers LTE-M (CAT M1) and NB-IoT (NB1, NB2) connectivity for global applications with fallback to 2G. The modem also includes an integrated GPS/GNSS radio. The NL-SW-LTE-TG1WWG 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 and 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-TG1WWG	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], B18[850], B19[850], B20[800], B25[1900], B26[850], B27[850], B28[700], B66[1700], B71[600], B85[700]
3G Technology Supported	N/A
3G Frequency Band	N/A
2G Technology Supported	GSM, EDGE, GPRS, EGPRS
2G Frequency Band	GSM850, EGSM900, DCS1800, PCS1900

DATA SPEEDS

Download Rate and Upload Rate	Download Max: LTE-M: 588 Kbps | NB-IoT: 120 Kbps | GPRS: 107 Kbps | EGPRS: 264 Kbps Upload Max: LTE-M: 1 Mbps | NB-IoT: 160 Kbps | EGPRS: 210 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, IPv4/IPv6, TLS 1.3/DTLS
SMS	SMS over IMS

LOCATION

GNSS	GPS, Glonass, Beidou, Galileo, and QZSS

POWER SUPPLY

Supply Voltage	3.4V to 4.2V (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

Data Interface	UART, USB (USB 2.0 compliant)
USB Driver Support	OS: Windows 10, Linux 4.15 Drivers: PPP	AT Console	ECM	MBIM
RF	Primary, SISO DL (U.FL)

SIM

Type	Integrated Verizon SIM, additional external 3FF slot

APPROVALS

Regulatory Certifications	PTCRB, CE/RED, FCC, IC
Carrier Approvals	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