



# 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

PARTNUMBER		
	DESCRIPTION	
NL-SW-LTE-QBG96	LTE-M, NB-IoT, 2G fallback, with GNSS	
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## **TECHNICAL SPECIFICATIONS**

#### **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			
Туре	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			
Туре	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			