

# **SKYWIRE® LTE-M, NB-IOT** End-Device Certified Modem



NimbeLink, a global leader in embedded cellular modem technology and asset tracking solutions, has created the Skywire NL-SW-LTE-QBG96 modem. This new Skywire modem offers LTE Category M/NB-IoT connectivity for global applications with fallback to 2G, as well as an integrated GPS/GNSS radio.

# **THE SKYWIRE FAMILY**

All Skywire modems are small, pin-compatible, End-Device Certified modems which enable easy integration with no further carrier testing requirements. This time-to-market advantage allows developers to quickly design in connectivity to cellular networks around the world. The NL-SW-LTE-QBG96 is compatible with the world's various LTE-M and NB-IoT networks.

# **FEATURES**

- No carrier certification required
- Small form-factor
- Skywire 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 Skywire modems
- GNSS support for GPS, GLONASS, Beidou/Compass, Galileo, QZSS
- Global hardware compatibility

# **PRODUCT BRIEF**

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

WWW.NIMBELINK.COM/SKYWIRE-CELLULAR-MODEM/

	TECHNICAL SPECIFICATIONS
NL-SW-LTE-QBG96	
TARGET REGION	
	Global
CELLULAR TECHNOLOGY	
LTE Category	LTE-M, NB-IoT
LTE Frequency Bands	LTE-FDD: B1, B2 B3, B4, B5, B8, B12, B13, B18, B19, B20, B26, B28 LTE-TDD: B39 (LTE-M only)
2G Technology Supported	EDGE, GPRS
2G Frequency Band	GSM850, GSM900, DCS1800, PCS1900
DATA SPEEDS	
Download Rate (Max.)	LTE-M: 300kbps   CAT NB-IoT: 32kbps   GSM GPRS: 107kbps   GSM EDGE: 296kbps
Upload Rate (Max.)	LTE-M: 375kbps   CAT NB-IoT: 70kbps   GSM GPRS: 85.6kbps   GSM EDGE: 236.8kbps
HARDWARE	
Form Factor	Skywire Interface
Dimensions	29mm x 33mm x 10.5mm
Weight	8 grams
GNSS	
Constellations	GPS, GLONASS, Beidou/Compass, Galileo, QZSS
INTERNET PROTOCOLS	
	PPP, TCP, UDP, SSL, TLS, FTP(S), HTTP(S), MQTT
POWER SUPPLY	
Supply Voltage	3.4V to 4.3V (3.8V Nominal)
Current Consumption (GNSS off)	LTE-M: 230mA   CAT NB-IoT:190 mA (Average)
Power Save Mode (PSM)	~10uA
Receive Sensitivity	LTE-M: -107 dBm   CAT NB-IoT: -113 dBm (Average)
INTERFACES	
Туре	UART, USB (USB 2.0 compliant)
USB Driver Support	Windows XP, Windows Vista, Windows 7, Windows 8/8.1, Windows 10, Windows CE 5.0/6.0/7.0, Linux 2.6/3.x/4.1, Android 4.x/5.x/6.x/7.x
SIM	
Туре	3FF SIM card slot
	Verizon eSIM on modem
APPROVALS	
Regulatory Certifications	Verizon ODI, PTCRB, GCF, RED, FCC, IC
Carrier	AT&T, Orange, Telstra, Telus, T-Mobile, Verizon, Vodafone
Compliance	RoHS compliant
TEMPERATURE RANGE	
Industrial Grade	-40°C to +85°C
SUPPORT AND WARRANTY	
	1 Year standard warranty



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