Skywire Nano Development Kit

A key emerging requirement for sensors and devices in IoT, particularly those that will run on batteries, is low-power operation. In the same way that the Skywire® Nano LTE-M CAT-M1/NB-IoT cellular modem is specifically designed to minimize power requirements, the Nano development kit is also engineered to help minimize the power requirement of the finished prototype. This makes the Nano development kit ideal for proof-of-concept and field-testable prototyping of low-power LTE-M IoT devices.

The development kit includes a Skywire Nano 4G LTE CAT-M1/NB-IoT Embedded Modem based on the Nordic NRF9160 SIP. Also included is an adapter board that allows customers to connect to a PC via USB or to virtually any application processor development kit via serial UART connection.

Part Number	Description
NL-SWNDK	Skywire Nano Development Kit

Features

- Powered over USB cable
- SMA connectors for LTE and GPS interfaces
- Provides USB to dual UART interface to communicate with modem
- Micro SIM card connector (3FF size)
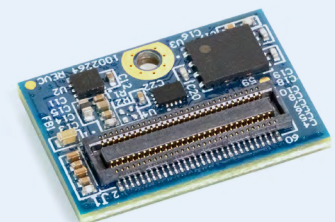- User controllable Tri-color LED, Button & 3-Axis Accelerometer

Advantages

- Get into production faster with published, editable design files
- Grove System connectors for developing quick proof of concepts
- Onboard SEGGER J-Link debugger for SWD and UART communications

About The Skywire Family

Skywire cellular modems are designed to make cellular integration as fast and as easy as it can be. Exceptionally small, pin-compatible, and end-device certified, Skywire modems enable developers to quickly and reliably connect IoT products to cellular networks around the world. Skywire modems are backed by industry leading documentation and expert-level product support.

Technical Specifications (NL-SWNDK)

Target Region	
	Global
Compatible Carriers	AT&T, Orange, Telstra, 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], B28[700], B66[1700]
3G Technology Supported	N/A
3G Frequency Band	N/A
2G Technology Supported	N/A
2G Frequency Band	N/A
Data Speeds	
Download Rate and Upload Rate	Download Max: LTE-M: 375 Kbps | NB-IoT: 60 Kbps Upload Max: LTE-M: 300 Kbps | NB-IoT: 30 Kbps
Hardware	
Form Factor	Skywire Nano Interface
Dimensions	97.5mm x 39.5mm x 12mm
Weight	26 grams
Internet Protocols	
Network Stack Support	NimbeLink provided AT command parser supporting: TCP/IP, UDP/IP, IPv4/IPv6, PING, Roadmap for TLS 1.2 and MQTT
SMS	SMS supported
Location	
GNSS	GPS
Power	
Supply Voltage	5V over USB
I/O Voltage	1.7 V - 3.6 V
Current Consumption	Average TBD | Peak TBD | Idle TBD | Sleep TBD
Interfaces	
Type	Micro USB, Grove System Connectors x 2
USB Driver Support	
RF	U.FL to SMA x 2
SIM	
Type	Micro SIM (3FF) connector and Verizon MFF2
Approvals	
Regulatory Certifications	FCC, IC, PTCRB
Carrier Approvals	Verizon
Compliance	RoHS compliant
Temperature Range	
Industrial Grade	-40°C to +85°C
Support and Warranty	
	1 Year standard warranty

About NimbeLink

NimbeLink is the world's most trusted partner for cellular solutions for the Industrial Internet of Things (IIoT). The Skywire® series of cellular embedded modems, enable dramatic reduction in development and time-to-market. NimbeLink also develops and markets complete, highly configurable edge-to-enterprise Asset-Tracking Solutions.

For more information, visit NimbeLink.com