NimbeLink®
Smart. Simple. Cellular.

Skywire Embedded Modems Technical Specs Comparison Chart

Use this comparison chart to choose the right Skywire® embedded modem for your IoT Project.
If you'd like to speak to a Sales representative, feel free to contact us.

	3G	LTE-M/NB-IoT	LTE-M/NB-IoT	LTE-M/NB-IoT	LTE CAT 1	LTE CAT 1	LTE CAT 1	LTE CAT 1	LTE CAT 4	LTE CAT 4	LTE CAT 4	LTE CAT 4	LTE CAT 4
	NL-SW-HSPA	NL-SWN-LTE-NRF9160	NL-SW-LTE-QBG96	NL-SW-LTE-QBG95	NL-SW-LTE-S7648	NL-SW-LTE-S7618RD	NL-SW-LTE-GELS3	NL-SW-LTE-SRC7611-1	NL-SW-LTE-S7588	NL-SW-LTE-TC4EU	NL-SW-LTE-TC4APG	NL-SW-LTE-TC4NAG	NL-SW-LTE-SRC7611-4
Target Region													
Region	Global	Global	Global	Global	North America	United States	United States	North America	North America	Europe	Asia-Pacific	North America	North America
Compatible Carriers	AT&T, T-Mobile, WW 3G Networks	AT&T, Orange, Telstra, Telus, T-Mobile, Verizon, Vodafone, and more	AT&T, Orange, Telstra, Telus, Verizon, Vodafone	AT&T, Orange, Telstra, Telus, T-Mobile, Verizon, Vodafone, and more	AT&T, Bell, Rogers, Telus, T-Mobile	Verizon	Verizon	AT&T, Bell, Rogers, Telus, Verizon	AT&T, Verizon	Orange, Vodafone	N/A	AT&T, Bell, Rogers, Telus, T-Mobile, Verizon	AT&T, Bell, Rogers, Telus, Verizon
Cellular Technology													
LTE Category	NA	LTE-M (CAT M1), NB-IoT (NB1, NB2)	LTE-M, NB-IoT	LTE-M (CAT M1), NB-IoT (NB1, NB2)	LTE CAT 1	LTE CAT 1	LTE CAT 1	LTE CAT 1	LTE CAT 4	LTE CAT 4	LTE CAT 4, 3GPP Release 10 Compliant	LTE CAT 4	LTE CAT 4
LTE Frequency Bands	N/A	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]	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)	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]	LTE B2 [1900], B4 [1700], B12 [700]	LTE B4 [1700], B13 [700]	LTE B4 [1700], B13 [700]	FDD B2[1900], B4[1700], B5[850], B12[700], B13[700], B14[700], B25[1900], B26 [850],B66[1700], B71[600]	LTE: B2 [1900], B4[1700], B5[850], B13[700], B17[700]	FDD B1[2100], B3[1800], B7 [2600], B8[900], B20[800]	FDD B1[2100], B3[1800], B5[850], B8[900], B9[1800], B18[850], B19 [850], B26[850], B28[700]	FDD B2[1900], B4[1700], B5[850], B12[700], B13[700], B14[700], B66[1700], B71[600]	FDD B2[1900], B4[1700], B5[850], B12[700], B13[700], B14[700], B25[1900], B26 [850],B66[1700], B71[600]
3G Technology Supported WW 3G providers	UMTS, HSPA+	N/A	N/A	N/A	N/A	N/A	N/A	N/A	HSPA+	HSPA+	HSPA+	DC-HSPA+	N/A
3G Frequency Band	B1[2100], B2[1900], B4[1700], B5 [850], B8[900]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	B2[1900], B5[850]	B1 [2100], B8 [900]	B1[2100], B5[850], B6[800], B8 [900], B19[800]	B2[1900], B4[1700], B5[850]	N/A
2G Technology Supported	GSM, EDGE, GPRS	N/A	GSM, EDGE, GPRS	GSM, EDGE, GPRS	N/A	N/A	N/A	N/A	N/A	GSM, EDGE	N/A	N/A	N/A
2G Frequency Band	GSM850/900, DCS1800, PCS1900	N/A	GSM850, EGSM900, DCS1800, PCS1900	GSM850, EGSM900, DCS1800, PCS1900	N/A	N/A	N/A	N/A	N/A	GSM900, DCS1800	N/A	N/A	N/A
Data Speeds													
Download Rate and Upload Rate	**Download:** HSPA+: 21.0 Mbps | EDGE: 296 Kbps | GPRS: 107 Kbps **Upload:** HSPA+ 5.76 Mbps | EDGE: 236.8 Kbps | GPRS: 85.6 Kbps	**Download Max:** LTE-M: 375 Kbps | NB-IoT: 60 Kbps **Upload Max:** LTE-M: 300 Kbps | NB-IoT: 30 Kbps	**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	**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	**Download:** LTE: 10 Mbps **Upload:** LTE: 5 Mbps	**Download:** LTE: 10 Mbps **Upload:** LTE: 5 Mbps	**Download:** LTE: 10 Mbps **Upload:** LTE: 5 Mbps	**Download:** LTE: 10 Mbps **Upload:** LTE: 5 Mbps	**Download:** LTE: 150 Mbps | HSPA+: 42.2 Mbps **Upload:** LTE: 50 Mbps | HSPA+: 5.7 Mbps	**Download:** LTE: 150 Mbps | HSPA+: 42.0 Mbps | EDGE: 296 Kbps **Upload:** LTE: 50 Mbps | HSPA+: 5.76 Mbps | EDGE: 236.8 Kbps	**Download:** LTE: 150 Mbps | HSPA+: 42.0 Mbps **Upload:** LTE: 50 Mbps | HSPA+: 5.76 Mbps	**Download:** LTE: 150 Mbps | HSPA+: 42.0 Mbps **Upload:** LTE: 50 Mbps | HSPA+: 5.76 Mbps	**Download:** LTE: 150 Mbps **Upload:** LTE: 50 Mbps
Hardware													
Form Factor	Skywire Interface	Skywire Nano Interface	Skywire Interface	Skywire Interface	Skywire Interface	Skywire Interface	Skywire Interface	Skywire Interface	Skywire Interface	Skywire Interface	Skywire Interface	Skywire Interface	Skywire Interface
Dimensions	29mm x 33mm x 10.5mm	22mm x 15mm x 4mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm	29mm x 33mm x 10.5mm
Weight	8 grams	4 grams	8 grams	8 grams	8 grams	8 grams	8 grams	8 grams	8 grams	8 grams	8 grams	8 grams	8 grams
Internet Protocols													
Network Stack Support	Integrated TCP/IP, UDP/IP, HTTP/HTTPS, FTP, SSL/TLS, IPv4/IPv6, NITZ, PING, PPP Stacks	NimbeLink provided AT command parser supporting: TCP/IP, UDP/IP, IPv4/IPv6, PING, Roadmap for TLS 1.2 and MQTT	Integrated TCP/IP, UDP/IP, HTTP/HTTPS, FTP/SFTP, SSL/TLS, IPv4/IPv6, NITZ, PING, MQTT, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP/HTTPS, FTP/SFTP, SSL/TLS, IPv4/IPv6, NITZ, PING, MQTT, PPP	Integrated TCP/IP, UDP/IP, HTTP, FTP, SSL/TLS, IPv4/IPv6, NITZ, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP, FTP, SSL/TLS, IPv4/IPv6, NITZ, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP/HTTPS, FTP, SMTP, IPv4/IPv6, NITZ, PING, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP, FTP, SSL/TLS, SMTP, IPv4/IPv6, NITZ, PING, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP, FTP, SSL/TLS, IPv4/IPv6, NITZ, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP, FTP, SSL/TLS, SMTP, IPv4/IPv6, NITZ, PING, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP, FTP, SSL/TLS, SMTP, IPv4/IPv6, NITZ, PING, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP, FTP, SSL/TLS, SMTP, IPv4/IPv6, NITZ, PING, PPP Stacks	Integrated TCP/IP, UDP/IP, HTTP, FTP, SSL/TLS, SMTP, IPv4/IPv6, NITZ, PING, PPP Stacks
SMS	SMS over GPRS	SMS supported	SMS supported	SMS supported	SMS over SGs	SMS over IMS and SGs	SMS over IMS	SMS over IMS	SMS over IMS and SGs	SMS over IMS	SMS over IMS	SMS over IMS	SMS over IMS
Location													
GNSS	GPS, GLONASS	GPS	GPS, GLONASS, Beidou/Compass, Galileo, QZSS	GPS, GLONASS, Beidou, Galileo	N/A	N/A	N/A	GPS, Glonass, Beidou, Galileo, and QZSS	N/A	N/A	GPS, Glonass, Beidou, Galileo, QZSS	GPS, Glonass, Beidou, Galileo, and QZSS	GPS, Glonass, Beidou, Galileo, and QZSS
Power Supply													
Supply Voltage	3.5V - 4.3V (3.8V nominal)	3.3V to 5.5V (3.8V nominal)	3.4V to 4.3V (3.8V nominal)	2.5V to 4.8V (3.8V nominal)	3V - 5.5V (3.8V nominal)	3V - 5.5V (3.8V nominal)	3V - 5.5V (3.8V nominal)	3.0V - 5.5V	3V to 5.5V (3.8V nominal)	3.4V - 4.2V (3.8V nominal)	3.4V - 4.2V (3.8V nominal)	1.65V - 5.5V	3.0V - 5.5V
I/O Voltage	1.65V - 5.5V	1.7V - 3.6V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V	1.65V - 5.5V
Current Consumption	Average 110 mA | Peak 215 mA | Idle 19 mA | Sleep N/A	Average TBD mA | Peak TBD mA | Idle TBD mA | Sleep TBD uA | PSM 5uA | eDRX 19uA	Average 130 mA | Peak 900 mA | Idle 19 mA | Sleep 680 uA	Average TBD mA | Peak TBD mA | Idle TBD mA | Sleep TBD uA	Average 135 mA | Peak 335 mA | Idle 35 mA | Sleep 18 mA	Average 177 mA | Peak 300 mA | Idle 54 mA | Sleep 24 mA	Average 135 mA | Peak 700 mA | Idle 48 mA | Sleep 8.6 mA	Average N/A | Peak N/A | Idle N/A | Sleep N/A	Average 66 mA | Peak 229 mA | Idle 14 mA | Sleep 11 mA	Average 135 mA | Peak 225 mA | Idle 40 mA | Sleep N/A	Average TBD mA | Peak TBD mA | Idle TBD mA | Sleep TBD	Average N/A | Peak N/A | Idle N/A | Sleep N/A	Average N/A | Peak N/A | Idle N/A | Sleep N/A
Interfaces													
Type	UART, USB (USB 2.0 compliant)	Multiple UART, SPI, I2C, GPIO	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)	UART, USB (USB 2.0 compliant)
USB Driver Support	**OS:** Windows 7 | Windows 8 | Windows 10 | Linux **Drivers:** PPP | NMEA | AT Console	N/A	**OS:** Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, Linux **Drivers:** PPP | QMI | AT Console	**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	**OS:** Windows XP | Windows Vista | Windows 7 | Windows 8 | Windows 10 | Linux **Drivers:** MBIM | PPP | NCM | ACM | AT Console	**OS:** Windows XP | Windows Vista | Windows 7 | Windows 8 | Windows 10 | Linux **Drivers:** MBIM | PPP | NCM | ACM | AT Console	**OS:** Windows XP | Windows Vista | Windows 7 | Windows 8 | Windows 10 | Linux **Drivers:** PPP | ECM | ACM | AT Console	**OS:** Windows 10 | Linux **Drivers:** MBIM | ECM | RIL | WMI | PPP | RmNet | QMI | NMEA | AT Console	**OS:** Windows XP | Windows Vista | Windows 7 | Windows 8 | Windows 10 | Linux **Drivers:** MBIM | PPP | NCM | ACM | AT Console	**OS:** Windows 7 | Windows 8 | Windows 10 | Linux **Drivers:** MBIM | PPP | RNDIS | ECM | QMI | NMEA | AT Console	**OS:** Windows 7 | Windows 8 | Windows 10 | Linux **Drivers:** MBIM | PPP | RNDIS | ECM | QMI | NMEA | AT Console	**OS:** Windows 7 | Windows 8 | Windows 10 | Linux **Drivers:** MBIM | PPP | RNDIS | ECM | QMI | NMEA | AT Console	**OS:** Windows 10 | Linux **Drivers:** MBIM | ECM | RIL | WMI | PPP | RmNet | QMI | NMEA | AT Console
RF	Primary (U.FL), Rx Diversity (U.FL)	Primary, SISO DL (U.FL)	Primary, SISO DL (U.FL)	Primary, SISO DL (U.FL)	Primary (U.FL), Rx Diversity (U.FL)	Primary (U.FL), Rx Diversity (U.FL)	Primary (U.FL), Rx Diversity and MIMO DL 2x2 (U.FL)	Primary (U.FL), Rx Diversity and MIMO DL 2x2 (U.FL)	Primary (U.FL), Rx Diversity and MIMO DL 2x2 (U.FL)	Primary (U.FL), Rx Diversity and MIMO DL 2x2 (U.FL)	Primary (U.FL), Rx Diversity and MIMO DL 2x2 (U.FL)	Primary (U.FL), Rx Diversity and MIMO DL 2x2 (U.FL)	Primary (U.FL), Rx Diversity and MIMO DL 2x2 (U.FL)
SIM													
Type	3FF SIM card slot	Integrated Verizon SIM, support for external SIM sockets	Dual MFF2 Verizon and 3FF standard	Dual MFF2 Verizon and 3FF standard	3FF SIM card slot	3FF SIM card slot	3FF SIM card slot	Integrated Verizon SIM, external 3FF slot	3FF SIM card slot	3FF SIM card slot	3FF SIM card slot	Dual MFF2 Verizon and 3FF standard	Integrated Verizon SIM, external 3FF slot
Approvals													
Regulatory Certifications	GCF, PTCRB, CE/RED, FCC, IC, Anatel	PTCRB, FCC, IC	PTCRB, CE/RED, FCC, IC	PTCRB, CE/RED, FCC, IC	PTCRB, FCC, IC	FCC	FCC	FCC, IC, PTCRB (In Progress)	PTCRB, FCC, IC	CE/RED	N/A	FCC, IC, PTCRB (In Progress)	FCC, IC, PTCRB (In Progress)
Carrier Approvals	AT&T, Rogers, Telus	AT&T, Verizon, and more	AT&T, Rogers (In-Progress), Telus, Verizon	AT&T, Rogers, Telus, Verizon, and more	AT&T, Rogers (In-Progress), Telus	Verizon	Verizon	AT&T (In-Progress), Rogers (In-Progress), Telus (In-Progress), Verizon (In-Progress)	AT&T, Verizon		TBD	AT&T (In-Progress), Rogers (In-Progress), Telus (In-Progress), Verizon	AT&T (In-Progress), Rogers (In-Progress), Telus (In-Progress), Verizon (In-Progress)
Compliance	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant	RoHS compliant
Temperature Range													
Industrial Grade	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Support and Warranty													
	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty	1 Year standard warranty