



# DIGI XBEE 3 GLOBAL LTE-M/NB-IOT DEVELOPMENT KIT

The Digi XBee 3 Global LTE-M/NB-IoT development kit provides OEMs with a simple, quick way to integrate cellular connectivity into their devices

Digi XBee® 3 Global LTE-M/NB-IoT embedded smart modems bring together the power and flexibility of the [Digi XBee Ecosystem](#) with the latest in LTE cellular technology. OEMs can quickly integrate cutting edge LTE cellular into their devices and applications, eliminating the time-consuming and expensive FCC and carrier end-device certification process.

The Digi XBee 3 Global LTE-M/NB-IoT development kit help developers integrate cellular connectivity into applications using Digi XBee 3 Global LTE-M/NB-IoT embedded modems. Starting with simple examples, we provide step-by-step guidance as you assemble the kit components to create reliable, low-power cellular communication connectivity for OEM devices like sensors and monitoring systems.

Each kit includes three months of cellular data service, pre-activated and ready to go, so your team can focus on your primary goal: prototyping and developing products.

This kit is designed for anyone interested in getting started in the world of embedded cellular. Hardware and software engineers, corporate technologists, or educators and students can quickly learn more about cellular integration using the hands-on examples included in the kit.

With the full suite of Standard Digi XBee API frames and AT commands, MicroPython and [Digi XCTU®](#), Digi XBee customers can seamlessly transition to this embedded modem with only minor software adjustments. OEMs can future-proof your

## Your kit includes:

- ✓ Digi XBee 3 Global LTE-M/NB-IoT embedded modem
- ✓ Digi XBee 3 Development Board
- ✓ SIM card for LTE-M cellular service out of the box
- ✓ 3 months of free cellular service\*
- ✓ Free schematic review by [Digi WDS](#)\*\*
- ✓ Antennas and power cable

PART NUMBER	DESCRIPTION	RECOMMENDED FOR NEW DESIGNS
XK3-C-A2-UT-002	Digi XBee 3 Global LTE-M/NB-IoT Development Kit	Yes

\*Service is limited to ~5 MB/month and limited SMS. For testing purposes only; not for production.

\*\*Level 1 review

designs by adding Digi XBee 3 Global LTE-M/NB-IoT. Ideal for any OEM business following an agile roadmap, Digi XBee 3 Global LTE-M/NB-IoT provides the flexibility to switch between wireless protocols or migrate to LTE Cat 1.

## SPECIFICATIONS

## DIGI XBEE 3 GLOBAL LTE-M/NB-IOT

## HARDWARE

CELLULAR CHIPSET	Telit ME310-WW
FORM FACTOR	Digi XBee® 20-pin through-hole
ANTENNA OPTIONS	1 U.FL (Cellular), 1 U.FL (Bluetooth®), 1 U.FL (GNSS)
DIMENSIONS	24.38 mm x 32.94 mm (0.96 in x 1.3 in)
OPERATING TEMPERATURE	-40 °C to 85 °C (-40 °F to 185 °F)
SIM SIZE	4FF Nano

## INTERFACE AND I/O

DATA INTERFACE	UART, SPI, USB
OPERATING MODES (LTE-M)	Transparent and API over serial, PPP over USB
OPERATING MODES (NB-IOT)	Transparent, API, UDP
SECURITY	Digi TrustFence® security with Secure Boot and Protected JTAG
CONFIGURATION TOOLS	Digi XCTU® (Local), Digi Remote Manager® (OTA)
EMBEDDED PROGRAMMABILITY	MicroPython with 1024 kB Flash / 64 kB RAM
I/O	4 ADC lines (10-bit), 13 digital I/O, USB, I2C
BLUETOOTH	Bluetooth Low Energy (BLE)

## CELLULAR CHARACTERISTICS

TRANSMIT POWER	Up to 23 dBm (LTE-M/NB-IoT), up to 33 dBm (2G)
RECEIVE SENSITIVITY (LTE-M)	-105 dBm
RECEIVE SENSITIVITY (NB-IOT)	-113 dBm
SUPPORTED BANDS	Bands 1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 27, 28, 66, 71 and 85
DOWNLINK/UPLINK SPEEDS (LTE-M)	Up to 588 Kbps downlink, up to 1 Mbps uplink
DOWNLINK/UPLINK SPEEDS (NB-IOT)	Up to 120 Kbps downlink, up to 160 Kbps uplink
DOWNLINK/UPLINK SPEEDS (2G)	Up to 264 Kbps downlink, up to 210 Kbps uplink
DUPLEX MODE	Half-duplex

## POWER REQUIREMENTS (AT 3.3 VDC INPUT POWER)

SUPPLY VOLTAGE	3.3 to 4.3 VDC
PEAK TRANSMIT CURRENT	550 mA with Bluetooth disabled; 610 mA with Bluetooth enabled
AVG TRANSMIT CURRENT (LTE-M)	1.25 A peak, 410 mA average (GM2 modules); 450 mA peak, 200 mA average (GM1 modules)
AVG TRANSMIT CURRENT (NB-IOT)	1.3 A peak, 410 mA average (GM2 modules); 400 mA peak, 270 mA average (GM1 modules)
AVG TRANSMIT CURRENT (2G)	2.1 A peak, 320 mA average (GM2 modules)
IDLE	200 mA peak, 100 mA average
POWER SAVE MODE	20 µA
DEEP SLEEP	2.65 µA

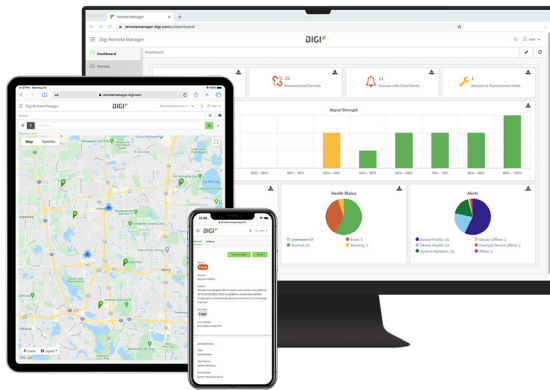
## REGULATORY AND CARRIER APPROVALS

FCC (USA)	MCQ-XB3M2
ISED (CANADA)	1846A-XB3M2
CE / RED (EUROPE)	Complete
RCM (AUSTRALIA/NEW ZEALAND)	Pending
UKCA (UNITED KINGDOM)	Complete
PTCRB, AT&T AND VERIZON	Complete

## WARRANTY

PRODUCT WARRANTY	1-year
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## DIGI REMOTE MANAGER



Digi Remote Manager® is the technology platform that brings networks to the next level, allowing networks — and the people who manage them — to work smarter. With Digi Remote Manager you can transform a multitude of dispersed IoT devices into a dynamic, intelligent network. Now you can easily deploy, monitor and diagnose thousands of mission-critical devices from a single point of command — on your desktop, tablet or phone. All the while, its software-defined security diligently safeguards your entire Digi ecosystem.

Learn more at [www.digi.com/digi-remote-manager](http://www.digi.com/digi-remote-manager)

### CAPABILITIES

- Activate, monitor and diagnose your mission-critical devices from a single point of command and control
- Schedule key operations — including firmware updates and file management — on a single device or on a group of devices, keeping your network functionality up-to-date and maintaining compliance standards
- Manage edge devices out-of-band via console terminal access
- Keep tabs on device health and connectivity across device deployments of any size
- Create detailed reports and enable real-time alerts for specified conditions
- Integrate device data through open APIs to gain deeper insights and control with third-party applications
- Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss

### INFRASTRUCTURE

- Hosted in a commercial-grade cloud server environment that meets SOC 1®, SOC 2® and SOC 3® standards
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

### SECURITY

- More than 175 security controls in place to protect your data
- Member of the Center for Internet Security® (CIS®)
- Enables compliance with security frameworks like ISO27002, HIPAA, NIST and more
- Earned Skyhigh's CloudTrust™ Program highest rating of Enterprise-Ready

## DIGI WIRELESS DESIGN SERVICES



DEFINITION



DEVELOPMENT



CERTIFICATION



MANUFACTURING

### GET TO MARKET FASTER WITH DIGI WDS

Digi Wireless Design Services (WDS) has a 15-year history of helping clients speed down the path to success by guiding them around the technological and regulatory certification pitfalls that botch budgets and disrupt product introductions.

We begin by actively listening to your business and technical requirements, and then leverage our proven methodology, world-class engineering expertise and library of IP to design a cost-effective solution that is tailored to your specific needs.

Accelerate toward the solution that is right for you and your customers. Contact [Digi WDS](#) to find out how we can guide you to success.

### DIGI WDS SERVICES

We offer services to support you wherever you are along your development path:

- Proof of concept
- Architecture consultation
- Requirements definition
- System, software and electrical design
- Design reviews
- Certifications
- Prototype build
- Manufacturing test fixtures

### DIGI WDS RECORD

Our record speaks for itself.

- 250+ product development projects
- 100+ certification failure rescues
- 100 million connected devices around the globe

## DIGI XBEE TOOLS

The Digi XBee Ecosystem® is fully supported with the award-winning Digi XBee Tools suite. Designed to support the full product lifecycle, from prototyping and development to deployment and ongoing monitoring, Digi XBee Tools includes code libraries, testing and prototyping tools, product development and manufacturing support, and tools for deploying and managing end devices in the field.



DEVELOP



BUILD



DEPLOY



MANAGE

## DIGI DATA PLAN SERVICES



### READY TO ACTIVATE

Modem includes SIM, ready to activate.

Work with Digi for your SIM and data management plan.

Visit [shop.digi.com](https://shop.digi.com) to activate.

- Ease of deployment and support with a single supplier
- Avoid extra costs and the complexity of having to purchase and insert SIM/program APN during manufacturing process
- No internal staff needed to manage carrier contracts and billing
- Leverage Digi's buying power; we work with carriers to secure volume pricing that we pass on to you, so you can roll out at your own pace, regardless of your deployment size

FOR MORE INFORMATION  
PLEASE VISIT [DIGI.COM](https://digi.com)

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