



GLOBAL LTE-M/NB-IOT  
SMART MODEM



Manage this device with  
**Digi Remote Manager**  
(1-year license included free)

# DIGI XBEE 3 GLOBAL AND LOW-POWER LTE-M/NB-IOT

## Compact, flexible cellular connectivity for IoT devices and gateways

Digi XBee® 3 Global LTE modules accelerate time-to-market for designers, OEMs and solution providers by quickly enabling wireless connectivity and easy-to-add functionality. Building on industry-leading technology, pre-certified Digi XBee 3 Global LTE modules offer the flexibility to switch between multiple frequencies and wireless protocols as needed.

Digi XBee 3 Global LTE modules are a key offering in the **Digi XBee Ecosystem** of wireless modules, adapters, tools and software — all engineered to accelerate product and application development, deployment and management.

Ideal for low-data (typically under 5 MB per month and where

latency is not critical), low-power, low-cost applications, Digi XBee 3 Global LTE-M/NB-IoT modules feature a power-saving mode which extends sleep time and battery life.

With **Digi Remote Manager**®, Digi XBee 3 Global LTE modules can be easily configured and controlled from a simple, central platform. Built-in **Digi TrustFence**® security, identity and data privacy features use more than 175 controls to protect against new and evolving cyber threats.

Standard Digi XBee API frames and AT commands, MicroPython and **Digi XCTU**® software tools simplify setup, configuration, testing and adding or changing functionality.

### FEATURES AND BENEFITS

- One hardware platform for use on LTE-M/NB-IoT networks with multi-band support to integrate with many carriers
- FCC certified and carrier end-device certified
- Integrated MicroPython programmability for edge compute
- MQTT support for Microsoft Azure and Amazon AWS
- Low power consumption optimized for long battery life
- Integrated with **Digi TrustFence**® security framework
- Manage and configure with **XCTU**® and **Digi Remote Manager**®
- **Digi XBee**® Transparent and API modes simplify design
- CE/RED certified and network tested
- 2G fallback/GNSS
- Bluetooth® Low Energy for beaconing, connecting to Bluetooth sensors and local configuration using the **Digi XBee Mobile** app
- Includes SIM, ready to activate at [shop.digi.com](http://shop.digi.com)

\*SIM included in select SKUs

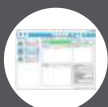
### RELATED PRODUCTS



Digi XBee® 3 Development Kit



ConnectCore® 6UL SBC Pro



Digi XCTU®



Digi Remote Manager®



Digi Wireless Design Services

### APPLICATION EXAMPLE



End user



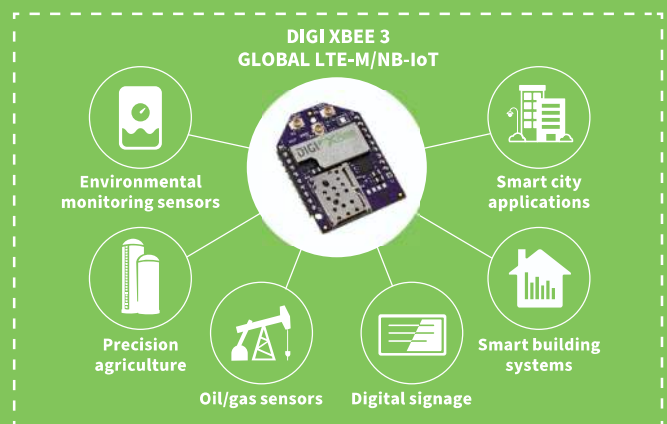
DIGI REMOTE MANAGER® /  
XBEE® CLOUD SERVICES



Cell tower



LTE-M/NB-IoT



## SPECIFICATIONS

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

## LOW-POWER LTE-M/NB-IOT

## HARDWARE

CELLULAR CHIPSET	Telit ME310-WW	Telit ME310-W1
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); 1-year license included free	
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	LTE bands: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B27, B28, B66, B71 and B85 2G bands: B2, B3, B5, B8	LTE bands: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B27, B28, B66, B71 and B85
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	
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
UKCA (UNITED KINGDOM)	Complete
JAPAN	Pending
BRAZIL	Pending
MEXICO (NOM)	Pending
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](http://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

### PART NUMBERS

### DIGI XBEE 3 GLOBAL AND LOW-POWER LTE-M/NB-IOT

XK3-C-GM2-UT-W	Digi XBee 3 Global LTE-M/NB-IoT Development Kit
XB3-C-GM2-UT-001	Digi XBee 3 Global LTE-M/NB-IoT, GNSS, 2G, no SIM
XB3-C-GM2-UT-101	Digi XBee 3 Global LTE-M/NB-IoT, GNSS, 2G, AT&T SIM
XB3-C-GM2-UT-102	Digi XBee 3 Global LTE-M/NB-IoT, GNSS, 2G, Verizon SIM
XB3-C-GM1-UT-001	Digi XBee 3 Low-Power LTE-M/NB-IoT, GNSS, no SIM
XB3-C-GM1-UT-101	Digi XBee 3 Low-Power LTE-M/NB-IoT, GNSS, AT&T SIM
XB3-C-GM1-UT-102	Digi XBee 3 Low-Power LTE-M/NB-IoT, GNSS, Verizon SIM
XBIB-CU-TH	Development Board — Digi XBee 3, USB-C, through-hole sockets
XBEE-MP-TH	Digi XBee Multi Programmer — through-hole (TH)
XBEE-MP-TH-PCB	Digi XBee Multi Programmer — through-hole (TH) printed circuit board

FOR MORE INFORMATION  
PLEASE VISIT [DIGI.COM](http://DIGI.COM)

**DIGI SERVICE AND SUPPORT** / You can purchase with confidence knowing that Digi is always available to serve you with expert technical support and our industry leading warranty. For detailed information visit [www.digi.com/support](http://www.digi.com/support).

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