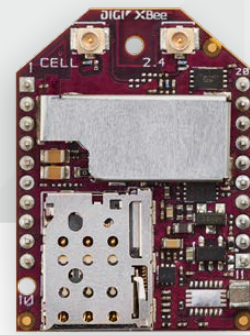




LTE-M/NB-IOT CELLULAR
SMART MODEM



DIGI XBEE 3 CELLULAR LTE-M/NB-IOT

Compact, flexible cellular connectivity for IoT devices and gateways.

Digi XBee® 3 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 modules offer the flexibility to switch between multiple frequencies and wireless protocols as needed.

Digi XBee 3 modules are the latest addition to the expanding Digi XBee Ecosystem of wireless modules, gateways, software and development tools – all engineered to accelerate development and deployment. Ideal for low-data (typically <5 MB per month and where latency is not critical), low-power,

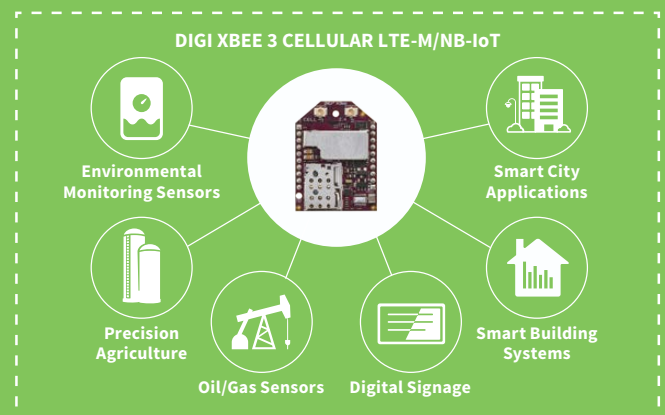
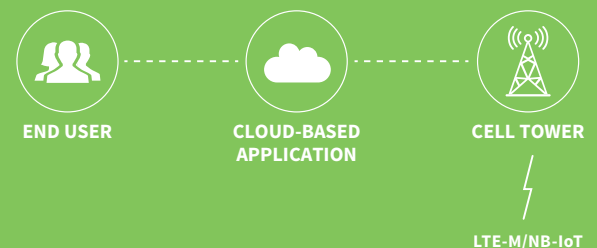
low-cost applications, Digi XBee 3 Cellular LTE-M/NB-IoT modules feature a power saving mode which extends sleep time and battery life.

With Digi Remote Manager®, Digi XBee 3 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 XCTU software tools simplify adding functionality, set-up, configuration and testing.

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
- Enhanced 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
- Dual-mode radio for local configuration over Bluetooth® low energy using the Digi XBee Mobile app

APPLICATION EXAMPLE



RELATED PRODUCTS



Development
Kits



ConnectCore®
6UL SBC Pro



XCTU



Digi Remote
Manager®



Digi Design
Services

SPECIFICATIONS		Digi XBee® 3 Cellular Smart Modem, LTE-M/NB-IoT	
HARDWARE			
CELLULAR CHIPSET		u-blox SARA-R410M-02B	
FORM FACTOR		Digi XBee® 20-pin through-hole	
ANTENNA OPTIONS		1 U.FL (Cellular), 1 U.FL (Bluetooth®)	
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 512 KB Flash / 64 KB RAM	
I/O		4 ADC lines (10-bit), 13 Digital I/O, USB, I²C	
BLUETOOTH		Bluetooth Low Energy Ready	
CELLULAR CHARACTERISTICS			
TRANSMIT POWER		Up to 23 dBm	
RECEIVE SENSITIVITY (LTE-M)		-105 dBm	
RECEIVE SENSITIVITY (NB-IOT)		-113 dBm	
CARRIER APPROVALS		AT&T End Device Certified (LTE-M) Verizon End Device Certified (LTE-M) Bell End Device Certified (LTE-M) Telus End Device Certified (LTE-M) Compatible with other carriers offering LTE-M and NB-IoT services (see supported bands below)	
SUPPORTED BANDS		Bands 1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 28 and 39	
DOWNLINK/UPLINK SPEEDS (LTE-M)		Up to 375 kb/s	
DOWNLINK/UPLINK SPEEDS (NB-IOT)		Up to 27.2 kb/s Downlink, 62.5 kb/s Uplink	
DUPLEX MODE		Half-Duplex	
POWER REQUIREMENTS (AT 3.3VDC INPUT POWER)			
SUPPLY VOLTAGE		3.3 - 4.3 VDC	
PEAK TRANSMIT CURRENT		550 mA w/ Bluetooth disabled; 610 mA w/ Bluetooth enabled	
AVG TRANSMIT CURRENT (LTE-M)		235 mA	
AVG TRANSMIT CURRENT (NB-IOT)		190 mA	
POWER SAVE MODE		20 uA	
DEEP SLEEP		10 uA	
REGULATORY APPROVALS			
FCC (USA)		MCQ-XB3M1	
IC (CANADA)		1846A-XB3M1	
CE / RED (EUROPE)		Complete	
RCM (AUSTRALIA/NEW ZEALAND)		Complete	
WARRANTY			
PRODUCT WARRANTY		1-year	

PART NUMBERS	DESCRIPTION
XB3-C-A2-UT-001	Digi XBee 3 Cellular Smart Modem, LTE-M/NB-IoT
XK3-C-A2-UT-U	Digi XBee 3 Cellular Smart Modem, LTE-M/NB-IoT, Development Kit, AT&T
XK3-C-N1-UT-E	Digi XBee 3 Cellular Smart Modem, LTE-M/NB-IoT, Development Kit

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