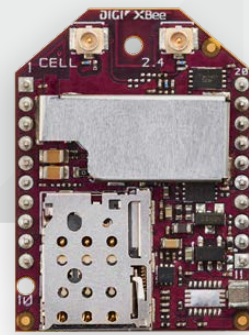




LTE-M/NB-IOT CELLULAR
SMART MODEM



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,

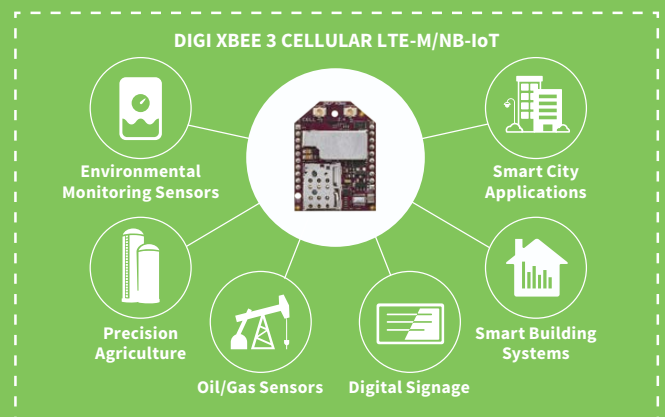
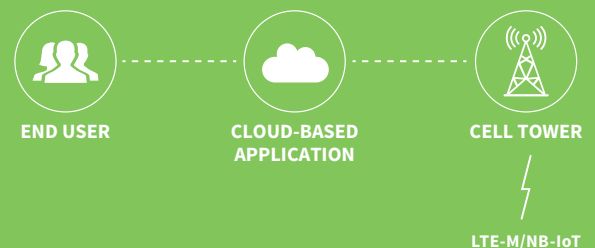
low-cost applications, Digi XBee 3 Cellular LTE-M/NB-IoT modules feature a power saving mode which extends sleep time and battery life.

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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