Digi XBee3® 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 XBee3 modules offer the flexibility to switch between multiple frequencies and wireless protocols as needed.

Digi XBee3 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 XBee3 Cellular LTE-M/NB-IoT modules feature a power saving mode which extends sleep time and battery life.

With Digi Remote Manager®, Digi XBee3 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.

**APPLICATION EXAMPLE**

**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
- 6 months of free cellular service with development kits
- 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

**RELATED PRODUCTS**
- Development Kits
- ConnectCore® 6UL SBC Pro
- XCTU
- Digi Remote Manager®
- Digi Design Services

**DIGI XBEE® CELLULAR LTE-M/NB-IoT**

Compact, flexible cellular connectivity for IoT devices and gateways.

**END USER**

**CLOUD-BASED APPLICATION**

**CELL TOWER**

**LTE-M/NB-IoT**

**DIGI XBEE® CELLULAR LTE-M/NB-IoT**

- Environmental Monitoring Sensors
- Precision Agriculture
- Oil/Gas Sensors
- Digital Signage
- Smart City Applications
- Smart Building Systems
- Smart City Applications
## Digi XBee3 Cellular Smart Modem, LTE-M/NB-IoT

### Specifications

#### 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
- **Operating Temperature**: -40º C to +85º C
- **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 or serial
- **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)
- **Embeddable Programmability**: MicroPython with 32 KB Flash / 32 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)
- T-Mobile End Device Certified (NB-IoT)*
- Vodafone End Device Certified (NB-IoT)
- Bell End Device Certification (Pending)
- Telus End Device Certification (Pending)
- 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
- **(NB-IOT)**: Up to 27.2 kb/s Downlink, 62.5kb/s Uplink

#### Duplex Mode
- Half-Duplex

#### Power Requirements (at 3.3VDC Input Power)
- **Supply Voltage**: 3.3-4.3VDC
- **Peak Transmit Current**: 550mA w/ Bluetooth disabled; 610mA w/ Bluetooth enabled
- **AVG Transmit Current (LTE-M)**: 235mA
- **AVG Transmit Current (NB-IoT)**: 190mA
- **Power Save Mode**: 20uA
- **Deep Sleep**: 10uA

**Regulatory Approvals**
- FCC (USA): MCQ-XB3M1
- IC (Canada): 1846A-XB3M1
- CE / RED (Europe): Complete

*For use on T-Mobile NB-IoT network for evaluation and development purposes. Full certification will be completed with an upcoming software revision (03B). Contact Digi sales for more information.*
### PART NUMBERS

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>XB3-C-A2-UT-001</td>
<td>Digi XBee3 Cellular Smart Modem, LTE-M/NB-IoT</td>
</tr>
<tr>
<td>XK3-C-A2-UT-U</td>
<td>Digi XBee3 Cellular Smart Modem, LTE-M/NB-IoT, Development Kit, AT&amp;T</td>
</tr>
<tr>
<td>XK3-C-N1-UT-E</td>
<td>Digi XBee3 Cellular Smart Modem, LTE-M/NB-IoT, Development Kit</td>
</tr>
</tbody>
</table>

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