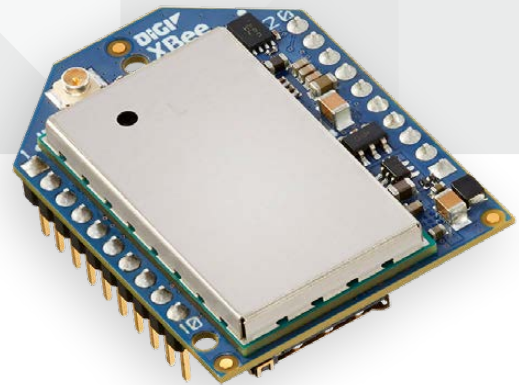




3G CELLULAR
SMART MODEM



DIGI XBEE® CELLULAR 3G

Digi XBee smart modems offer the easiest way to integrate cellular connectivity into an OEM device or IoT gateway.

Digi XBee Cellular smart modems were specifically designed to accelerate time to market for OEMs or solution providers adding cellular technology to their products. The modems are end-device certified, so there is no need to go through the costly and lengthy FCC or carrier end-device certifications. The software integration is simplified by using Digi's straightforward and flexible API.

Digi XBee Cellular 3G devices support 3G standards (HSPA/GSM) with fall back to 2G to maximize coverage globally. It is ideally suited for OEMs looking to have global cellular coverage on their products while minimizing the number of wireless standards supported.

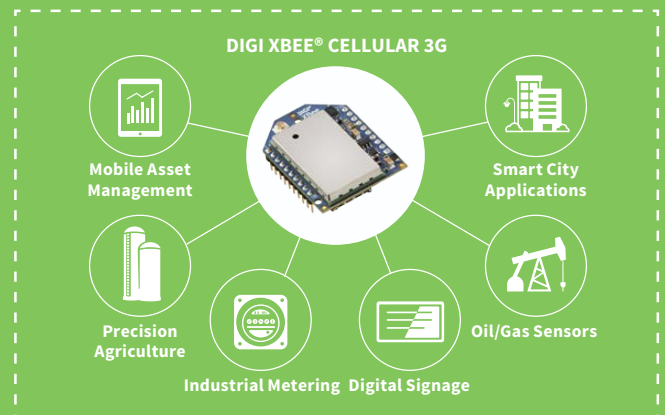
With the suite of standard XBee API frames and AT commands, existing Digi XBee customers can seamlessly transition to this new modem with only minor software adjustments. When OEMs add the Digi XBee Cellular to their design, they create a future-proof design with flexibility to switch between wireless protocols or frequencies as needed, ideal for any business with an agile roadmap.

Like all Digi products, customers can manage all of their wireless devices with Digi Remote Manager®. The XBee Cellular can also be bundled with a cellular data plan and SIM, eliminating the hassle of securing and managing carrier data plans.

BENEFITS

- FCC/IC, PTCRB, and AT&T certified – eliminates certification costs and risks
- Integrated MicroPython programmability enables custom scripting directly on the modem
- 90 days of free cellular service with development kits
- Low-power modes for battery powered applications
- Enhanced with Digi TrustFence® security framework
- Manage and configure with XCTU and Digi Remote Manager®
- Transparent and API modes simplify software integration

APPLICATION EXAMPLE



RELATED PRODUCTS



Development Kits ConnectCore® 6UL SBC Pro XCTU Digi Remote Manager® Digi Design Services



SPECIFICATIONS

Digi XBee® Cellular Smart Modem, 3G

INTERFACES AND HARDWARE

CHIPSET REFERENCE	u-blox U201
SERIAL DATA INTERFACE	UART, SPI coming soon
CONFIGURATION METHODS	AT Commands, API Frames, local or OTA
OPERATING MODES	Transparent, API, Bypass
PROGRAMMABILITY	MicroPython with 8 KB Flash / 24 KB RAM
ANALOG I/O	4 ADC lines (10-bit)
DIGITAL I/O	13 DIO lines
FORM FACTOR	Digi XBee 20-pin through-hole
ANTENNA OPTIONS	1 U.FL
DIMENSIONS	24.38 mm x 32.94 mm
OPERATING TEMPERATURE	-40° C to +85° C (-30 to +70C if 2G fallback is enabled)
SIM CARD	4FF (Nano size)

RF CHARACTERISTICS

TRANSMIT POWER	Up to 24 dBm (Power Class 3)
RECEIVE SENSITIVITY	-111 dBm

NETWORKING AND CARRIER

CARRIER AND TECHNOLOGY	3G HSPA/GSM with 2G fall-back (see User Guide for more details on this feature)
SUPPORTED BANDS	Band 19 (800 MHz), Band 5 (850 Mhz), Band 8 (900 MHz), Band 2 (1900 MHz), Band 1 (2100 MHz)
SECURITY	Digi Trustfence™ security with Secure Boot, Encrypted Storage, Protected JTAG, SSL/TLS 1.2
RF THROUGHPUT	Up to 921 Kbps
DOWNLINK/UPLINK SPEEDS	7.2 Mbps / 5.76 Mbps

POWER REQUIREMENTS

SUPPLY VOLTAGE	2.7 to 5.5 V
TRANSMIT CURRENT (24 DBM)	702 mA @ 3.3 V 425 mA @ 5 V
RECEIVE CURRENT	224 mA @ 3.3 V 160 mA @ 5 V
IDLE CURRENT (LISTENING)	87 mA @ 3.3 V 72 mA @ 5 V
DEEP SLEEP CURRENT	10 uA @ 3.3 V

REGULATORY AND CARRIER APPROVALS

UNITED STATES	Contains FCC ID: XPY1CGM5NNN
CANADA	Contains IC: 8595A-1CGM5NNN
ETSI (EUROPE)	CE/RED
RCM (AUSTRALIA/NEW ZEALAND)	Coming soon
ROHS	Lead-free and RoHS compliant
PTCRB CERTIFICATION	Yes
AT&T END DEVICE CERTIFIED	Yes

PART NUMBERS

DESCRIPTION

XBC-M5-UT-001	Digi XBee Cellular 3G, U.FL, TH, US/Canada/LATAM/EU
XKC-M5T-W	Digi XBee Cellular 3G Development Kit, U.FL, TH, US/Canada/LATAM/EU