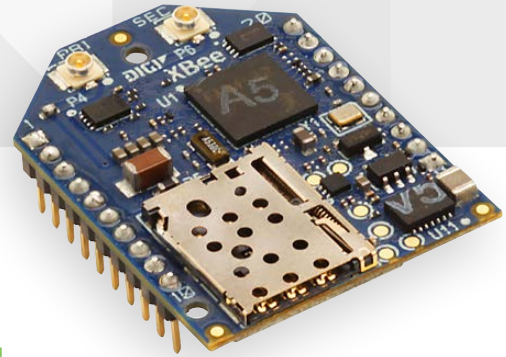


4G LTE CAT 1 CELLULAR  
EMBEDDED MODEM



# DIGI XBEE® CELLULAR LTE CAT 1

XBee Cellular LTE Cat 1 embedded modems provide OEMs with a simple way to integrate cellular connectivity into their devices

Digi is excited to bring together the power and flexibility of the XBee ecosystem with the latest 4G cellular technology, with the Digi XBee Cellular LTE Cat 1 embedded modem. This solution enables OEMs to quickly integrate cutting edge 4G cellular technology into their devices and applications without dealing with the painful, time-consuming, expensive FCC and carrier end-device certifications. A bundled data plan will be included with every development kit with 6 months of free data, with the XBee fully pre-provisioned and ready to communicate over the cellular network right out of the box.

With the full suite of standard XBee API frames and AT commands, existing XBee customers can seamlessly transition

to this new modem with only minor software adjustments. When OEMs add the 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.

Digi offers cellular service which is bundled with free Digi Remote Management to remotely monitor and manage devices, along with the capability to do over the air (OTA) remote firmware upgrades. For more information or to receive a quote, contact your sales representative or call Digi Sales at 952-912-3444 / 877-912-3444.

## BENEFITS

- Convenient Digi data plans available for Digi XBee Cellular
- FCC certified and Carrier End-device certified for Verizon and AT&T
- Smallest end-device certified cellular modem
- XBee Transparent and API modes simplify s/w design
- Direct USB provides easy PPP integration option
- Integrated MicroPython programmability enables custom scripting directly on the modem
- OTA firmware updates
- Enhanced with Digi TrustFence® security framework
- Manage and configure with XCTU and Digi Remote Manager®

## RELATED PRODUCTS



Development  
Kits



ConnectCore®  
6UL SBC Pro



XCTU



Digi Remote  
Manager®



Digi  
TrustFence®

## APPLICATION EXAMPLE



COMPUTER



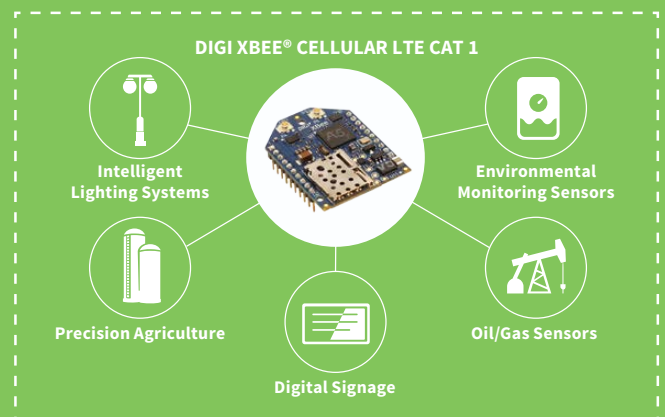
CLOUD-BASED  
APPLICATION



CELL TOWER



LTE Cat 1



## SPECIFICATIONS

# Digi XBee® Cellular LTE Cat 1

### INTERFACES AND HARDWARE

<b>SERIAL DATA INTERFACE</b>	UART (USB coming soon)
<b>ANALOG I/O</b>	4 ADC lines
<b>DIGITAL I/O</b>	15 DIO lines
<b>FORM FACTOR</b>	20-pin XBee through-hole
<b>WIRELESS INTERFACES</b>	Bluetooth LE Ready
<b>PROGRAMMABLE</b>	Built-in MicroPython support with 24KB RAM / 8KB Flash
<b>ANTENNA OPTIONS</b>	2 U.FL for primary and secondary antennas
<b>DIMENSIONS</b>	0.960 x 1.297 in (2.438 x 3.294 cm)
<b>OPERATING MODES</b>	Transparent, API, and Bypass mode
<b>CHIPSET REFERENCE</b>	Telit/Altair
<b>OPERATING TEMPERATURE</b>	-40° C to +80° C
<b>SIM CARD</b>	4FF (Nano size)

### RF CHARACTERISTICS

<b>MODULATION</b>	LTE/4G – QPSK, 16QAM
<b>TRANSMIT POWER</b>	23dBm
<b>RECEIVE SENSITIVITY</b>	-102 dBm

### NETWORKING AND CARRIER

<b>CARRIER AND TECHNOLOGY</b>	Verizon 4G LTE Cat 1
<b>SUPPORTED BANDS</b>	4/13
<b>TRUSTFENCE™ SECURITY</b>	Secure Boot, Encrypted Storage, Protected JTAG
<b>THROUGHPUT</b>	Upload up to 5Mbps / Download up to 10Mbps via USB2.0, Up to 921Kbps bidirectionally via UART
<b>DATA PLAN OPTIONS</b>	Digi data plans available - Contact Digi for more information

### POWER REQUIREMENTS

<b>SUPPLY VOLTAGE</b>	3.0 to 5.5v
<b>TRANSMIT CURRENT</b>	860 mA average, 1020 mA Peak @ 3.3V
<b>RECEIVE CURRENT</b>	530 mA average @ 3.3V
<b>IDLE CURRENT (LISTENING)</b>	143 mA @ 3.3V
<b>DEEP SLEEP</b>	Approximately 10µA

### REGULATORY AND CARRIER APPROVALS

<b>FCC (USA)</b>	Contains: FCC: RI7LE866SV1
<b>IC (CANADA)</b>	Contains: IC: 5131A-LE866SV1
<b>END DEVICE CERTIFIED</b>	Verizon, AT&T, and PTCRB

## PART NUMBERS

## DESCRIPTION

<b>XBC-V1-UT-001</b>	Digi XBee Cellular LTE Cat 1, Verizon LTE Cat 1, Dual U.FL, TH, USA
<b>XKC-V1T-U</b>	Digi XBee Cellular LTE Cat 1 Development Kit, Verizon LTE Cat 1, USA

