DIGI XBEE 3 GLOBAL LTE CAT 1

Digi XBee 3 Global LTE Cat 1 smart modems offer the easiest way to integrate cellular connectivity into an OEM device or IoT gateway

Digi XBee® 3 Global LTE 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 Global LTE Cat 1 modules offer the flexibility to switch between multiple frequencies and wireless protocols as needed.

Ideal for moderate bandwidth (typically less than 25 MB per month) and low-cost IoT applications, Digi XBee 3 Global LTE Cat 1 modules are cost-competitive with other modules that are based on older standards.

With Digi Remote Manager®, Digi XBee 3 Global LTE Cat 1 modules can be easily configured and controlled from a central platform. Built-in Digi TrustFence® security, identity and data privacy features use multiple layers of control to protect against new and evolving cyber threats. Standard Digi XBee API frames and AT commands, MicroPython and Digi XCTU® simplify setup, configuration, testing and adding or changing functionality.

Digi XBee 3 Global LTE Cat 1 modules are a key offering in the Digi XBee Ecosystem of wireless modules, adapters, tools and software — all engineered to accelerate product and application development, deployment and management.

FEATURES AND BENEFITS

– Integrated MicroPython programmability enables custom scripting directly on the modem
– 2G and 3G fallback to ensure connectivity
– GNSS for accurate location services
– Transparent and API modes simplify software design
– MQTT support for Microsoft Azure and Amazon AWS
– FCC certified and end-device certified with major carriers
– Direct USB provides easy PPP integration option
– OTA firmware updates
– Integrated with Digi TrustFence security framework
– Manage/configure with Digi XCTU and Digi Remote Manager
– Bluetooth® Low Energy for beaconing, connecting to Bluetooth sensors and local configuration using the Digi XBee Mobile App
– Includes SIM*, ready to activate at shop.digi.com
  *SIM included in select SKUs

APPLICATION EXAMPLE

End user

DIGI REMOTE MANAGER® /
XBEE® CLOUD SERVICES

Cell tower

LTE Cat 1

DIGI XBEE 3
GLOBAL LTE CAT 1

Intelligent
lighting systems

Environmental
monitoring sensors

Precision agriculture

Digital signage

Oil/gas sensors

RELATED PRODUCTS

Digi XBee 3
Development Kit

Digi ConnectCore
6UL SBC Pro

Digi XCTU

Digi Remote
Manager

Digi Wireless
Design Services

SPECIFICATIONS	DIGI XBEE 3 GLOBAL LTE CAT 1	DIGI XBEE 3 NORTH AMERICA LTE CAT 1
HARDWARE		
CELLULAR CHIPSET	Thales PLS63-W	Thales PLS63-X
FORM FACTOR (CONNECTOR FOOTPRINT)	Digi XBee® 20-pin through-hole	
ANTENNA OPTIONS	2 U.FL: cellular diversity, 1 U.FL: GNSS Embedded Bluetooth® antenna	
DIMENSIONS	30.48 mm x 43.18 mm (1.2 in x 1.7 in)	
OPERATING TEMPERATURE	-40 °C to 80 °C (-40 °F to 176 °F)	
SIM SIZE	4FF Nano	
INTERFACE AND I/O		
DATA INTERFACE	UART, SPI, USB	
OPERATING MODES	Transparent and API over serial, PPP over USB	
SECURITY	Digi TrustFence® security with secure boot and protected JTAG	
CONFIGURATION TOOLS	Digi XCTU® (local), Digi Remote Manager® (OTA)	
EMBEDDED PROGRAMMABILITY	MicroPython with 8 MB flash / 64 kB RAM	
I/O	4 ADC lines (10-bit), 13 digital I/O, I2C	
BLUETOOTH	Bluetooth Low Energy (BLE)	
CELLULAR CHARACTERISTICS		
TRANSMIT POWER: 4G LTE/3G/2G	23 dBm / 23.5 dBm / 30-33 dBm	23 dBm / 23.5 dBm / N/A
RECEIVE SENSITIVITY: 4G LTE/3G/2G	103 dBm / 110 dBm / 108 dBm	103 dBm / 110 dBm / N/A
SUPPORTED BANDS	Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 25, 26, 28, 66; TDD: 38, 40, 41	Bands 2, 4, 5, 12, 13, 14, 25, 26, 66, 71
DOWNLINK/UPLINK SPEEDS	10 Mbps downlink, 5 Mbps uplink (USB) 921 kbps downlink and uplink (UART)	
DUPLEX MODE	Full-duplex	
POWER REQUIREMENTS (AT 3.3 VDC INPUT POWER)		
SUPPLY VOLTAGE	2.8 to 5.5 V	
PEAK TRANSMIT CURRENT	1050 mA with Bluetooth disabled; 1090 mA with Bluetooth enabled	
AVG TRANSMIT CURRENT	890 mA	
AVG RECEIVE CURRENT	320 mA	
REGULATORY AND CARRIER APPROVALS		
FCC (USA)	MCQ-XB3C2 and QIPPLS63-W	MCQ-XB3C2 and QIPPLS63-X
ISED (CANADA)	1846A-XB3C2 and 7830A-PLS63W	1846A-XB3C2 and 7830A-PLS63X
CE / RED (EUROPE)	Complete	N/A
RCM (AUSTRALIA/NEW ZEALAND)	Pending	N/A
ANATEL (BRAZIL)	Complete	N/A
UKCA (UNITED KINGDOM)	Complete	N/A
PTCRB, AT&T AND VERIZON	Complete	Complete
WARRANTY		
PRODUCT WARRANTY	1-year	

DIGI!

DIGI REMOTE MANAGER
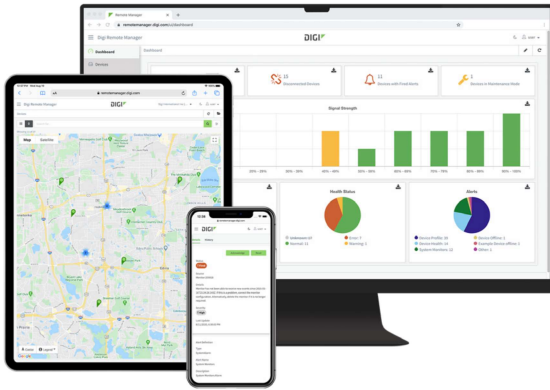
Digi Remote Manager® is the technology platform that brings networks to the next level, allowing networks — and the people who manage them — to work smarter. With Digi Remote Manager you can transform a multitude of dispersed IoT devices into a dynamic, intelligent network. Now you can easily deploy, monitor and diagnose thousands of mission-critical devices from a single point of command — on your desktop, tablet or phone. All the while, its software-defined security diligently safeguards your entire Digi ecosystem.

Learn more at www.digi.com/digi-remote-manager

CAPABILITIES

– Activate, monitor and diagnose your mission-critical devices from a single point of command and control
– Schedule key operations — including firmware updates and file management — on a single device or on a group of devices, keeping your network functionality up-to-date and maintaining compliance standards
– Manage edge devices out-of-band via console terminal access
– Keep tabs on device health and connectivity across device deployments of any size
– Create detailed reports and enable real-time alerts for specified conditions
– Integrate device data through open APIs to gain deeper insights and control with third-party applications
– Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss

INFRASTRUCTURE

– Hosted in a commercial-grade cloud server environment that meets SOC 1®, SOC 2® and SOC 3® standards
– Superior availability, operating to 99.9% or greater
– Open APIs available to support application development

SECURITY

– More than 175 security controls in place to protect your data
– Member of the Center for Internet Security® (CIS®)
– Enables compliance with security frameworks like ISO27002, HIPAA, NIST and more
– Earned Skyhigh's CloudTrust™ Program highest rating of Enterprise-Ready

DIGI WIRELESS DESIGN SERVICES

DEFINITION

DEVELOPMENT

CERTIFICATION

MANUFACTURING

GET TO MARKET FASTER WITH DIGI WDS

Digi Wireless Design Services (WDS) has a 15-year history of helping clients speed down the path to success by guiding them around the technological and regulatory certification pitfalls that botch budgets and disrupt product introductions.

We begin by actively listening to your business and technical requirements, and then leverage our proven methodology, world-class engineering expertise and library of IP to design a cost-effective solution that is tailored to your specific needs.

Accelerate toward the solution that is right for you and your customers. Contact Digi WDS to find out how we can guide you to success.

DIGI WDS SERVICES

We offer services to support you wherever you are along your development path:

– Proof of concept
– Architecture consultation
– Requirements definition
– System, software and electrical design
– Design reviews
– Certifications
– Prototype build
– Manufacturing test fixtures

DIGI WDS RECORD

Our record speaks for itself.

– 250+ product development projects
– 100+ certification failure rescues
– 100 million connected devices around the globe

DIGI XBEE TOOLS

The Digi XBee® Ecosystem is fully supported with the award-winning Digi XBee Tools suite. Designed to support the full product lifecycle, from prototyping and development to deployment and ongoing monitoring, Digi XBee Tools includes code libraries, testing and prototyping tools, product development and manufacturing support, and tools for deploying and managing end devices in the field.

DEVELOP　　**BUILD**　　**DEPLOY**　　**MANAGE**

DIGI DATA PLAN SERVICES

READY TO ACTIVATE

Modem includes SIM, ready to activate.

Work with Digi for your SIM and data management plan.

Visit shop.digi.com to activate.

- Ease of deployment and support with a single supplier
- Avoid extra costs and the complexity of having to purchase and insert SIM/program APN during manufacturing process
- No internal staff needed to manage carrier contracts and billing
- Leverage Digi's buying power; we work with carriers to secure volume pricing that we pass on to you, so you can roll out at your own pace, regardless of your deployment size

PART NUMBERS	DIGI XBEE 3 GLOBAL LTE CAT 1
XK3-C-G1-UT-W	Digi XBee 3 Global LTE Cat 1 Development Kit
XB3-C-G1-UT-001	Digi XBee 3 Global LTE Cat 1, 3G/2G, GNSS, no SIM
XB3-C-G1-UT-101	Digi XBee 3 Global LTE Cat 1, 3G/2G, GNSS, AT&T SIM
XB3-C-G1-UT-102	Digi XBee 3 Global LTE Cat 1, 3G/2G, GNSS, Verizon SIM
XB3-C-N1-UT-001	Digi XBee 3 North America LTE Cat 1, 3G, GNSS, no SIM
XB3-C-N1-UT-101	Digi XBee 3 North America LTE Cat 1, 3G, GNSS, AT&T SIM
XB3-C-N1-UT-102	Digi XBee 3 North America LTE Cat 1, 3G, GNSS, Verizon SIM
XBIB-CU-TH	Development Board — Digi XBee 3, USB-C, through-hole sockets
XBEE-MP-TH	Digi XBee Multi Programmer — through-hole (TH)
XBEE-MP-TH-PCB	Digi XBee Multi Programmer — through-hole (TH) printed circuit board

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