

Digi XBee® Family Features Comparison

Family	Frequency	Protocol	Description	RF Line of Sight Range	Form Factor	Development Kit Part Numbers	RF Data Rate	Current Draw Tx/Rx	Hardware Reference # / Chipset(s)	Certified Regions
XBee® Cellular	Bands 4 and 13	LTE Cat 1 	Pre-certified for LTE Cat 1, in an XBee form factor	Cellular Network Coverage	 Through-Hole	XKC-V1T-U	10 Mbps Down / 5 Mbps Up	860mA / 530mA	SiLabs EFM32GG395F1024 ARM M3 MCU	US
XBee® Wi-Fi	2.4 GHz	IEEE 802.11 	Wi-Fi 802.11b/g/n with easy provisioning and point-to-multipoint device connectivity	N/A	 Through-Hole	XKA2B-WFT-0	1 to 72 Mbps	309 mA / 100 mA	S6B SiLabs EFM32LG230 ARM M3 MCU, Atheros AR4100 Transceiver	US, CA, EU, AU, JP
XBee® DigiMesh® 2.4		 Through-Hole		DigiMesh networking, low-cost, low-power		4000 ft (1200 m)	250 Kbps	33mA / 28mA	S2C SiLabs EM357 SoC	US, CA, EU, AUS/ NZ, BR, JP
XBee-PRO DigiMesh® 2.4				Extended-range DigiMesh	2 miles (3200 m)	120 mA / 31 mA		US, CA, AU, NZ, BR		
XBee® 802.15.4			low cost, low power point-to-multipoint device connectivity	4000 ft (1.2 km)	 Surface Mount	XKB2-A2T-WWC		33mA / 28mA		US, CA, EU, AUS/ NZ, BR, JP
XBee-PRO® 802.15.4			Point to multipoint extended range version	2 miles (3.2 km)	120mA / 31 mA	US, CA, AU, NZ, BR				
XBee® ZigBee			ZigBee mesh networking, low-cost, low-power	4000 ft / 1.2 km	XKB2-Z7T-WZM	33mA / 28mA		US, CA, EU, AUS/ NZ, BR, JP		
XBee-PRO® ZigBee			Extended-range ZigBee	2 miles / 3.2 km	XKA2C-Z7T-U	120 mA / 31 mA		US, CA, AU, NZ, BR		
XBee® ZigBee - Thread Ready		ZigBee protocol (upgradable to Thread protocol) low cost, low power	4000 ft (1.2km)	 Surface Mount	XKB2-Z7T-WTZM	33mA / 28mA	S2D SiLabs EM3587 SoC	US, CA, EU		
XBee-PRO® 900HP	900 MHz	Multipoint  DigiMesh® 	Extended-range peer-to-peer mesh, sleeping routers	9 miles / 14.5 km	 Through-Hole	XKB9-DMT-UHP (US/CA) XKB9-DMT-AHP (AU) XKB9-DMT-BHP (BR) XKB9-DMT-SHP (SGP)	10 Kbps or 200 Kbps	215 mA / 29 mA	S3B SiLabs EFM32G230F128 ARM M3 MCU, Analog Devices ADF7023 Transceiver	US, CA, AU, BR
XBee® SX			20mW networking XBee module for mission critical applications	9 miles / 14 km	 Surface Mount	XK9X-DMS-0	250 Kbps	55 mA / 40 mA	S10 SiLabs EFM32LG230F256G ARM M3 MCU, Analog Devices ADF7023 Transceiver, LNA/SAW (PRO version: PA+LNA/SAW)	US, CA, AU, NZ (BR Pending)
XBee-PRO® SX			1-Watt networking XBee module for mission critical applications	65 miles / 105 km				900 mA / 40 mA		US, CA, AU, (BR Pending)
XBee® 868LP	868 MHz	Multipoint  DigiMesh® 	Low-cost, low-power peer-to-peer mesh for Europe	5.2 miles / 8.4 km	 Surface Mount	XK8-DMS-0 XK8-DMSB0	10 Kbps or 80 Kbps	48 mA / 27 mA	S8 SiLabs EFM32G230F128 ARM M3 MCU, Analog Devices ADF7023 Transceiver	EU

Programmable versions are also available in several of these products.

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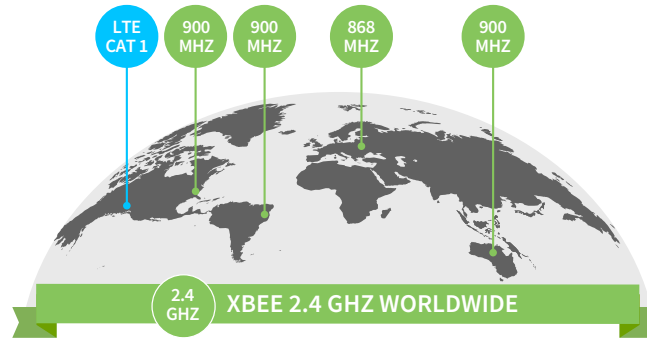


Small, Simple, Pre-certified and Ready to Communicate

Digi XBee® is the world's #1 selling RF module in the marketplace today. Many of the largest energy companies, utilities, industrial and transit agencies rely on Digi's RF expertise. Digi XBee solutions are simple, scalable, secure, and enable customers to get their connected products and services to market faster.

Worldwide Deployment

- Digi offers frequencies from 2.4GHz (global) and sub GHz solutions for regional ISM solutions
- Available in various power ranges from 8mW up to 1W for flexibility in range and power consumption
- Pre-certified for use in various regions of the world
- In one design footprint, XBee modules support multiple wireless protocols and RF frequencies around the globe. This flexibility lowers manufacturing and engineering costs and offers OEMs ability to quickly expand their roadmap



Multiple Protocols

XBee modules leverage multiple types of wireless protocols which are suitable for all sorts of different network architectures. These protocols can be grouped in two categories: “point-to-multipoint” and “mesh networking” which are explained below:

Point-to-Multipoint Networking

In networking, point-to-multipoint communication is accomplished by a one-to-one or one-to-many connection, providing multiple paths from a single location to multiple locations. Here are some of the protocols that fall under point-to-multipoint:



802.15.4

IEEE 802.15.4 is a standard which specifies the physical layer and media access control and is ideal for applications requiring low latency and predictable communication timing.



802.11 (Wi-Fi)

IEEE 802.11, or more commonly known as Wi-Fi, has a variety of sub-protocols represented by the suffix a/b/g/n/ac with varying degrees of bandwidth.



Cellular

With the introduction of protocols such as LTE Cat 1, M1, and NB-IOT, cellular data rates have come down to a point where it should be considered for certain low power applications.

Mesh Networking

Mesh networking is used in applications where the range between two points may be beyond the range of the two radios located at those points, but intermediate radios are in place that could forward on any messages to and from the desired radios.



ZigBee

ZigBee is an open, global wireless standard developed to address the needs of low-cost, low-power wireless M2M networks.



DigiMesh

DigiMesh is similar to ZigBee mesh networking, but unlike ZigBee, DigiMesh only has one node-type that can route data and are interchangeable. DigiMesh is a proprietary, low-power mesh networking protocol with a single node-type, and capable of scaling for larger networks.



Thread

Thread is an open, global, IPv6 based, low power mesh networking protocol that is simple to setup and use.

● Nodes ■ Boarder routers

Digi XBee Form Factor

The XBee comes in two hardware footprints; Through-Hole and Surface Mount. This includes the 20-pin socket for TH, and 37 pads for the SMT, and these footprints take very little space on a PCB.



Digi XBee Kits

Kits include multiple modules, dev boards, cables – everything you need to evaluate Digi XBee for your application.

Featured:



Digi XBee ZigBee Mesh Kit

Learn about XBee RF modules for device connectivity and ZigBee based mesh networking.

PART NUMBER: XKB2-Z7T-WZM
XBee S2C ZigBee Mesh Kit

PART NUMBER: ZKB2-Z7T-WTSM
XBee S2D ZigBee Mesh Kit



Digi XBee SX Development Kit

Learn about XBee SX high-power 900 MHz modules for device connectivity and sensor networking.

PART NUMBER: XK9X-DMS-0
Digi XBee SX Development Kit

