



## Stand-Alone Radio Modems

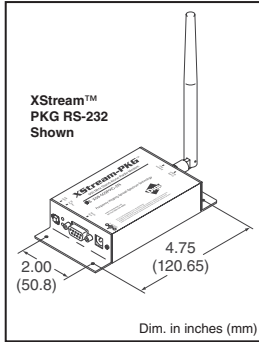
Digi International stand-alone radio modems were designed to provide end users with an easy-to-install wireless serial communication link.

### Features:

- Plug and communicate (no configuration required)
- Transparent operation supports existing software and systems
- Retries and acknowledgements for guaranteed packet delivery
- RS-232/422/485, Ethernet, USB protocol and multi-drop bus support
- Low power modes for current consumption as low as 1mA
- Support for multiple data formats (7/8 bits, Even/Odd/No Parity)
- Selectable power outputs

### Includes:

- Stand-Alone Radio Modem
- CD (software and documentation)
- 1/2 wave antenna
- Serial loopback adapter
- NULL modem adapter (male-to-male)
- NULL modem adapter (female-to-female)
- Male DB-9 to RJ-45 adapter
- Power adapter
- 9V battery adapter
- RS-232 cable (6')



| Frequency | Power Output | RF Data Rate (Baud) | Connection Type | Digi-Key Part No. | Price Each | Digi International Part No. |
|-----------|--------------|---------------------|-----------------|-------------------|------------|-----------------------------|
| 900 MHz   | 1Watt        | 115K                | RS-232          | XT09-PKI-RA-ND    | 299.00     | XT09-PKI-RA                 |
| 900 MHz   | 1Watt        | 115K                | USB             | XT09-PKC-UA-ND    | 319.76     | XT09-PKC-UA                 |
| 900 MHz   | 100mW        | 9600                | RS-232          | X09-009PKC-RA-ND  | 250.00     | X09-009PKC-RA               |
| 900 MHz   | 100mW        | 19.2K               | RS-232          | X09-019PKC-RA-ND  | 250.00     | X09-019PKC-RA               |
| 2.4 GHz   | 50mW         | 9600                | RS-232          | X24-009PKC-RA-ND  | 199.00     | X24-009PKC-RA               |
| 2.4 GHz   | 50mW         | 19.2K               | RS-232          | X24-019PKC-RA-ND  | 199.00     | X24-019PKC-RA               |
| 900 MHz   | 100mW        | 9600                | USB             | X09-009PKC-UA-ND  | 250.00     | X09-009PKC-UA               |
| 900 MHz   | 100mW        | 19.2K               | USB             | X09-019PKC-UA-ND  | 250.00     | X09-019PKC-UA               |
| 2.4 GHz   | 50mW         | 9600                | USB             | X24-009PKC-UA-ND  | 199.00     | X24-009PKC-UA               |
| 2.4 GHz   | 50mW         | 19.2K               | USB             | X24-019PKC-UA-ND  | 199.00     | X24-019PKC-UA               |
| 900 MHz   | 100mW        | 9600                | Ethernet        | X09-009PKC-EA-ND  | 350.00     | X09-009PKC-EA               |
| 900 MHz   | 100mW        | 19.2K               | Ethernet        | X09-019PKC-EA-ND  | 350.00     | X09-019PKC-EA               |
| 900 MHz   | 4mW          | 38.4K               | RS-232          | XC09-038PKC-RA-ND | 99.00      | XC09-038PKC-RA              |
| 900 MHz   | 4mW          | 38.4K               | USB             | XC09-038PKC-UA-ND | 99.00      | XC09-038PKC-UA              |

◆ RoHS Compliant

## Wireless Development Kits

### Development Kit Features:

- Plug-and-communicate (default mode - no configuration required)
- True peer to peer network (no need to configure a "Master" radio)
- Transparent mode supports existing software applications and legacy systems
- Addressing capabilities provide for point-to-point and point-to-multipoint networks
- Uses standard AT commands and/or fast binary commands for changing parameters
- Native RS485/422 (multi-drop-bus) protocol support
- Retries and acknowledgements of packets
- Provides guaranteed delivery of critical packets in difficult environments
- Multiple low power modes including shutdown pin, cyclic sleep and serial port sleep
- Signal strength register for link quality monitoring and debugging

- Male DB-9 to RJ-45 adapter
- Female DB-9 to RJ-45 adapter
- (2) Power adapters
- 9V battery adapter
- (2) RS-232 cables (6')

### XCite™ Development Kits Include:

- XCite wireless module with an integrated wire antenna
- XCite wireless module with 1/2 wave dipole antenna
- (2) RS-232 PC serial interface boards
- (2) DSub-9 serial cables
- (2) 9V 400mA power supplies
- 9V battery clip adapter
- Serial loopback adapter
- NULL modem adapter (male-to-male)
- NULL modem adapter (female-to-female)
- X-CTU test/config. utility software (EXE file)

### XTend™ Development Kits Include:

- XTend OEM RF modules with 1/2 wave dipole antennas
- (2) RS-232 PC serial interface boards
- (2) DSub-9 serial cables
- (2) 9V 400mA power supplies
- 9V battery clip adapter
- Serial loopback adapter
- NULL modem adapter (male-to-male)
- NULL modem adapter (female-to-female)
- X-CTU test/config. utility software

### XStream™ Development Kits Include:

- XStream wireless module with an integrated wire antenna
- XStream wireless module with 1/2 Wave dipole antenna
- (2) RS-232/422/485 interface boards
- CD (X-CTU™ software and documentation)
- Serial loopback adapter
- NULL modem adapter (male-to-male)
- NULL modem adapter (female-to-female)

| Frequency                       | Power Output | RF Data Rate (Baud) | Digi-Key Part No. | Price Each | Digi International Part No. |
|---------------------------------|--------------|---------------------|-------------------|------------|-----------------------------|
| <b>XStream Development Kits</b> |              |                     |                   |            |                             |
| 900 MHz                         | 100mW        | 9600                | X09-009-DK-ND     | 409.00     | X09-009-DK                  |
| 900 MHz                         | 100mW        | 19.2K               | X09-019-DK-ND     | 409.00     | X09-019-DK                  |
| 2.4 GHz                         | 50mW         | 9600                | X24-009-DK-ND     | 409.00     | X24-009-DK                  |
| 2.4 GHz                         | 50mW         | 19.2K               | X24-019-DK-ND     | 409.00     | X24-019-DK                  |
| <b>XCite Development Kits</b>   |              |                     |                   |            |                             |
| 900 MHz                         | 5mW          | 9600                | XC09-009-DK-ND    | 149.00     | XC09-009-DK                 |
| 900 MHz                         | 5mW          | 38.4K               | XC09-038-DK-ND    | 149.00     | XC09-038-DK                 |
| <b>XTend Development Kits</b>   |              |                     |                   |            |                             |
| 900 MHz                         | 1 Watt       | 115K                | XT09-DK-ND        | 499.00     | XT09-DK                     |

◆ RoHS Compliant

## Wireless OEM Modules

XStream™, XCite™ and XTend™ Wireless OEM Modules were designed to provide product designers with a transparent and easy to design-in wireless serial communication link.

### Features:

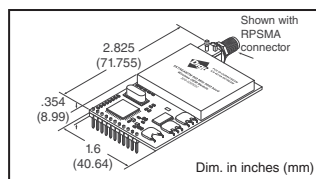
- Plug-and-communicate (no configuration required)
- Transparent operation supports existing software and systems
- 5V CMOS level serial interface (configurable interface baud rate)
- XON/XOFF or hardware flow control
- Support for multiple data formats (7/8/9 bits, Even/Odd/No Parity)
- Low power modes down to 10µA

**XStream:** Range: Up to 1500 feet indoor/urban • Up to 7 miles line-of-sight with dipole • Up to 20 miles line-of-sight with high gain • Allows up to 7 FHSS (frequency hopping spread spectrum) pairs to operate in close proximity • Board size: 1.6" (40.64mm) x 2.825" (71.755mm) • +110dBm receiver sensitivity • Board size: 1.456" (36.98mm) x 2.402" (61mm) • Power: 5VDC supply voltage

**XCite:** Range: 300 feet indoor/urban • 1000 feet line-of-sight with dipole • Allows up to 7 FHSS (fre-

quency hopping spread spectrum) pairs to operate in close proximity • -108dBm receiver sensitivity • Board size: 1.6" (40.64mm) x 2.825" (71.755mm) • Power: 2.85VDC to 5.50VDC

**XTend:** Range: Up to 3,000 feet indoor/urban • Up to 14 miles line-of-sight with dipole • Up to 40 miles line-of-sight with high gain • Allows up to 10 FHSS (frequency hopping spread spectrum) pairs to operate in close proximity • +110dBm receiver sensitivity • Board size: 1.456" (36.98mm) x 2.402" (61mm) • Power: 2.8 to 5.5VDC



## XBee™, XBee-PRO™ and XBee™ Series 2 Wireless Modules

XBee and XBee-PRO Wireless Modules were designed to provide all the benefits of low-power advanced networking in a low-cost solution that dramatically reduces time-to-market. In addition, the small form factor saves valuable board space. The XBee Series 2 is based on ZigBee/802.15.4 silicon from Ember™. It features ZigBee firmware for

creating ad-hoc mesh networks.

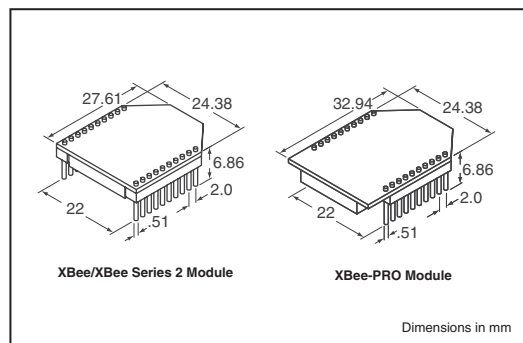
### Features:

- Plug and communicate (No configuration required)
- Retries and acknowledgements for guaranteed packet delivery
- Uses standard AT commands for changing parameters
- Low power modes down to 10µA

### Development Kit Includes:

- (2) XBee Modules with wire and U.F.L. (3) XBee Modules with each antenna option
- RPSMA 1/2 wave antenna
- Cables
- Connectors
- XCTU Software
- 9V clip and adaptor
- (2) XBee-Series 2 OEM RF Modules
- (5) Development Boards

| Frequency  | Power Output | RF Data Rate (Baud) | Connection / Antenna Type | Digi-Key Part No. | Price Each | Digi International Part No. |
|--|--------------|---------------------|---------------------------|-------------------|------------|-----------------------------|
| <b>XBee Modules — RoHS Compliant</b>                     |              |                     |                           |                   |            |                             |
| 2.4 GHz  | 1mW          | 250K                | Whip Antenna              | XB24-AWI-001-ND   | 19.00      | XB24-AWI-001                |
| 2.4 GHz  | 1mW          | 250K                | Chip Antenna              | XB24-ACI-001-ND   | 23.20      | XB24-ACI-001                |
| 2.4 GHz  | 1mW          | 250K                | U.F.L Connector           | XB24-AUI-001-ND   | 23.20      | XB24-AUI-001                |
| <b>XBee-PRO Modules — RoHS Compliant</b>                 |              |                     |                           |                   |            |                             |
| 2.4 GHz  | 100mW        | 250K                | Whip Antenna              | XBP24-AWI-001-ND  | 32.00      | XBP24-AWI-001               |
| 2.4 GHz  | 100mW        | 250K                | Chip Antenna              | XBP24-ACI-001-ND  | 36.00      | XBP24-ACI-001               |
| 2.4 GHz  | 100mW        | 250K                | U.F.L Connector           | XBP24-AUI-001-ND  | 36.00      | XBP24-AUI-001               |
| <b>XBee Series 2 Modules — RoHS Compliant</b>            |              |                     |                           |                   |            |                             |
| 2.4 GHz  | 2mW          | 250K                | Chip Antenna              | XB24-BCIT-004-ND  | 21.00      | XB24-BCIT-004               |
| 2.4 GHz  | 2mW          | 250K                | Wire Antenna              | XB24-BWIT-004-ND  | 21.00      | XB24-BWIT-004               |
| 2.4 GHz  | 2mW          | 250K                | RPSMA                     | XB24-BSIT-004-ND  | 23.00      | XB24-BSIT-004               |
| 2.4 GHz  | 2mW          | 250K                | U.F.L Connector           | XB24-BUIT-004-ND  | 21.00      | XB24-BUIT-004               |
| <b>XBee, XBee-PRO and XBee Series 2 Development Kits</b> |              |                     |                           |                   |            |                             |
| Developer's Starter Kit for XBee                         |              |                     |                           | XB24-DKS-ND       | 129.00     | XB-DKS                      |
| Developer's Kit for XBee-PRO                             |              |                     |                           | XP24-DKS-ND       | 179.00     | XPB-DKS                     |
| Development Kit for XBee-PRO                             |              |                     |                           | XB24-PDK-ND       | 339.00     | XB24-PDK                    |
| Development Kit for XBee Series 2                        |              |                     |                           | XB24-BPDK-ND      | 339.00     | XB24-BPDK                   |



More Product Available Online: [www.digkey.com](http://www.digkey.com)

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