

# XBee® Family Features Comparison

| Protocol                                                                                                                   | Product                 | Certified Regions      | Frequency          | Positioning                                                               | RF Line of Sight Range | Transmit Power | Receiver Sensitivity | Form Factor       |                                                                                       | RF Data Rate        | Programmable Variant   | Hardware |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------|--------------------|---------------------------------------------------------------------------|------------------------|----------------|----------------------|-------------------|---------------------------------------------------------------------------------------|---------------------|------------------------|----------|
| IEEE 802.11                                                                                                                | XBee® Wi-Fi             | US, CA, EU, AU, JP     | 2.4 GHz            | Low-power serial to Wi-Fi b/g/n                                           | N/A                    | +16 dBm        | -93 to -71 dBm       | Through-hole, SMT |    | 1 to 72 Mbps        | N/A                    | S6B      |
| IEEE 802.15.4<br>                         | XBee® 802.15.4          | US, CA, EU, AU, BR, JP | 2.4 GHz            | Low-cost, low-power multipoint                                            | 300 ft / 90 m          | 0 dBm          | -92 dBm              | Through-hole      |    | 250 Kbps            | N/A                    | S1       |
|                                                                                                                            | XBee-PRO® 802.15.4      | US, CA, AU, BR         | 2.4 GHz            | Extended-range multipoint                                                 | 1 mile / 1.6 km        | +18 dBm        | -100 dBm             |                   |    | 250 Kbps            | N/A                    | S1       |
|                                                                                                                            |                         | US, CA, EU, AU, BR, JP | 2.4 GHz            | International/"J" variant                                                 | 2500 ft / 1 km         | +10 dBm        | -100 dBm             |                   |    | 250 Kbps            | N/A                    | S1       |
| Multipoint Proprietary<br>                | XBee-PRO® XSC           | US, CA, AU             | 900 MHz            | Long-range multipoint for North America                                   | 9 miles / 14.5 km      | +24 dBm        | -107 to -109 dBm     | Through-hole      |    | 10 Kbps or 20 Kbps  | N/A                    | S3B      |
|                                                                                                                            | XBee-PRO® 868           | EU                     | 868 MHz            | Long-range multipoint for Europe                                          | 25 miles / 40 km       | +25 dBm        | -112 dBm             |                   |    | 24 Kbps             | N/A                    | S5       |
| ZigBee® PRO Feature Set<br>               | XBee® ZB SMT            | US, CA, EU, AU, BR, JP | 2.4 GHz            | Surface mount, low-cost, low-power, ZigBee PRO Feature Set, EM357         | 4000 ft / 1.2 km       | +8 dBm         | -102 dBm             | SMT               |    | 250 Kbps            | 32 KB Flash / 2 KB RAM | S2C      |
|                                                                                                                            | XBee-PRO® ZB SMT        | US, CA, AU, BR         | 2.4 GHz            | Extended-range, surface mount, ZigBee PRO Feature Set, EM357              | 2 miles / 3.2 km       | +18 dBm        | -101 dBm             |                   |    | 250 Kbps            | 32 KB Flash / 2 KB RAM | S2C      |
|                                                                                                                            | XBee® ZB                | US, CA, EU, AU, BR, JP | 2.4 GHz            | Through-hole, low-cost, low-power, ZigBee PRO Feature Set, EM250          | 400 ft / 120 m         | +3 dBm         | -96 dBm              | Through-hole      |    | 250 Kbps            | N/A                    | S2       |
|                                                                                                                            | XBee-PRO® ZB            | US, CA, AU, BR         | 2.4 GHz            | Extended-range, through-hole, ZigBee PRO Feature Set, EM250               | 2 miles / 3.2 km       | +18 dBm        | -102 dBm             |                   |    | 250 Kbps            | 32 KB Flash / 2 KB RAM | S2B      |
|                                                                                                                            |                         | US, CA, EU, AU, BR, JP | 2.4 GHz            | International/"J" variant                                                 | 5000 ft / 1.5 km       | +10 dBm        | -102 dBm             |                   |  | 250 Kbps            | 32 KB Flash / 2 KB RAM | S2B      |
|                                                                                                                            |                         |                        |                    |                                                                           |                        |                |                      |                   |                                                                                       |                     |                        |          |
| ZigBee® Smart Energy Public Profile<br> | XBee® SE                | US, CA, EU, AU, BR, JP | 2.4 GHz            | Low-cost, low-power, ZigBee PRO Feature Set                               | 400 ft / 120 m         | +3 dBm         | -96 dBm              | Through-hole      |  | 250 Kbps            | N/A                    | S2       |
|                                                                                                                            | XBee-PRO® SE            | US, CA, AU, BR         | 2.4 GHz            | Extended-range ZigBee PRO Feature Set                                     | 2 miles / 3.2 km       | +18 dBm        | -102 dBm             |                   |  | 250 Kbps            | N/A                    | S2B      |
|                                                                                                                            |                         | US, CA, EU, AU, BR, JP | 2.4 GHz            | International/"J" variant                                                 | 5000 ft / 1.5 km       | +10 dBm        | -102 dBm             |                   |  | 250 Kbps            | N/A                    | S2B      |
| DigiMesh® Proprietary<br>               | XBee-PRO® 900HP         | US, CA, AU, BR         | 900 MHz            | Extended-range peer-to-peer mesh, sleeping routers                        | 9 miles / 14.5 km      | +24 dBm        | -101 to -110 dBm     | Through-hole      |  | 10 Kbps or 200 Kbps | 32 KB Flash / 2 KB RAM | S3B      |
|                                                                                                                            | XBee® 865/868LP         | India, EU              | 865 MHz or 868 MHz | Low-power RF module for India (865 MHz) or Europe (868 MHz) with DigiMesh | 2.5 miles / 4 km       | +12 dBm        | -101 to -106 dBm     | SMT               |  | 10 Kbps or 80 Kbps  | 32 KB Flash / 2 KB RAM | S8       |
|                                                                                                                            | XBee® DigiMesh® 2.4     | US, CA, EU, AU, BR, JP | 2.4 GHz            | Low-cost, low-power peer-to-peer mesh, sleeping routers                   | 300 ft / 90 m          | 0 dBm          | -92 dBm              | Through-hole      |  | 250 Kbps            | N/A                    | S1       |
|                                                                                                                            | XBee-PRO® DigiMesh® 2.4 | US, CA, AU, BR         | 2.4 GHz            | Extended-range peer-to-peer mesh, sleeping routers                        | 1 mile / 1.6 km        | +18 dBm        | -100 dBm             |                   |  | 250 Kbps            | N/A                    | S1       |
|                                                                                                                            |                         | US, CA, EU, AU, BR, JP | 2.4 GHz            | International/"J" variant                                                 | 3200 ft / 1 km         | +10 dBm        | -100 dBm             |                   |  | 250 Kbps            | N/A                    | S1       |

