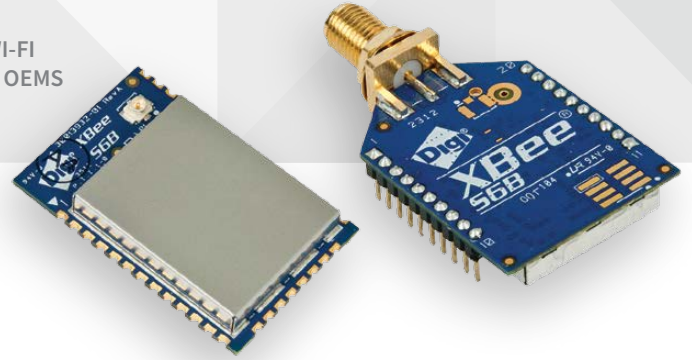




EMBEDDED WI-FI
MODULE FOR OEMS



XBEE® WI-FI

Embedded Wi-Fi modules provide ultra low-power 802.11b/g/n communications in the flexible XBee hardware and software footprint

XBee Wi-Fi embedded RF modules provide simple serial to IEEE 802.11 connectivity. By bridging the low-power/low-cost requirements of wireless device networking with the proven infrastructure of 802.11, the XBee Wi-Fi creates new wireless opportunities for energy management, process and factory automation, wireless sensor networks, intelligent asset management and more. Featuring easy provisioning methods and native Digi Device CloudSM connectivity, XBee Wi-Fi modules give developers the fastest IP-to-device and device-to-cloud capability possible. Focused on the rigorous requirements of these wireless device networks, the module gives developers IP-to-device and device-to-cloud capability.

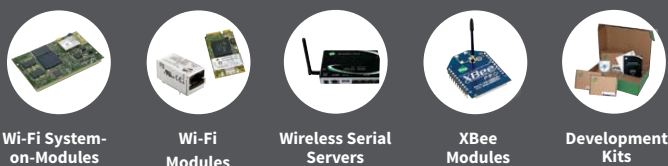
XBee modules offer developers tremendous flexibility and are available in surface mount and through-hole form factors. The XBee Wi-Fi shares a common footprint with other XBee modules. This allows different XBee technologies to be drop-in replacements for each other.

As a member of the XBee family, the XBee Wi-Fi combines hardware with software for a complete modular solution. XBee Wi-Fi modules are designed to communicate with access points in existing 802.11 infrastructures. Developers can use AT and API commands for advanced configuration options.

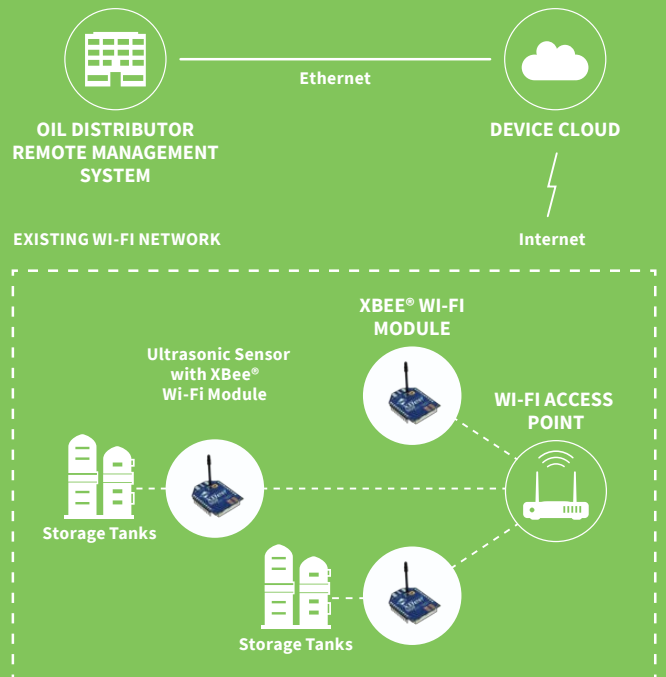
BENEFITS

- Native Device Cloud integration for data acquisition and device management
- Hardware and software complete module easily joins existing 802.11 b/g/n (Wi-Fi) infrastructures
- Common XBee footprint allows OEMs to support a variety of wireless protocols
- Flexible SPI and UART serial interfaces
- Available in Surface Mount and Through-Hole form factors
- Support for low-power sleeping applications with <math><6 \mu A</math> power-down current
- Over-the-air data rates up to 72 Mbps
- Simple provisioning methods including Soft AP and Wi-Fi Protected Setup (WPS)

RELATED PRODUCTS



APPLICATION EXAMPLE



SPECIFICATIONS

XBee® Wi-Fi (S6B)

FEATURES

SERIAL DATA INTERFACE	UART up to 1 Mbps, SPI up to 6 Mbps
CONFIGURATION METHOD	API or AT commands
FREQUENCY BAND	ISM 2.4 GHz
ADC INPUTS	4 (12-bit)
DIGITAL I/O	10
FORM FACTOR	Through-Hole, Surface Mount
ANTENNA OPTIONS	Through-Hole: PCB (Embedded), U.FL, RPSMA, Integrated Wire; SMT: PCB (Embedded), U.FL, RF Pad
OPERATING TEMPERATURE	-30° C to +85° C
DIMENSIONS (L X W)	Through-Hole: 0.960 in x 1.297 in (2.438 cm x 3.294 cm); SMT: 0.87 in x 1.33 in x 0.12 in (2.20 cm x 3.40 cm x 0.30 cm)

NETWORKING AND SECURITY

SECURITY	WPA-PSK, WPA2-PSK and WEP
CHANNELS	13 channels

WIRELESS LAN

STANDARD	802.11b/g/n
DATA RATES	1 Mbps to 72 Mbps
MODULATION	802.11b: CCK, DSSS; 802.11g/n: OFDM with BPSK, QPSK, 16-QAM, 64-QAM
TRANSMIT POWER	Up to +16 dBm (+13 dBm for Europe/Australia/Brazil)
RECEIVER SENSITIVITY	-93 to -71 dBm

POWER REQUIREMENTS

SUPPLY VOLTAGE	3.14 - 3.46 VDC
TRANSMIT CURRENT	Up to 309 mA
RECEIVE CURRENT	100 mA
POWER-DOWN CURRENT	<6 µA @ 25° C

REGULATORY APPROVALS

FCC (USA)	Yes
IC (CANADA)	Yes
CE/ETSI (EUROPE)	Yes
C-TICK (AUSTRALIA)	Yes
TELEC (JAPAN)	Yes
ANATEL (BRAZIL)	Yes

PART NUMBERS

DESCRIPTION

XB2B-WFPS-001	XBee Wi-Fi (S6B), PCB Antenna, SMT
XB2B-WFRS-001	XBee Wi-Fi (S6B), RF Pad Antenna, SMT
XB2B-WFUS-001	XBee Wi-Fi (S6B), U.FL Antenna, SMT
XB2B-WFPT-001	XBee Wi-Fi (S6B), PCB Antenna, Through-Hole
XB2B-WFUT-001	XBee Wi-Fi (S6B), U.FL Antenna, Through-Hole
XB2B-WFWT-001	XBee Wi-Fi (S6B), Wire Antenna, Through-Hole
XB2B-WFST-001	XBee Wi-Fi (S6B), RPSMA Antenna, Through-Hole

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