



**THE DATASHEET OF
WSN802GDK**



WSN802G

900 MHz • DNT900/2.4 GHz • DNT2400

Battery-Powered Wi-Fi™

Low-Power 802.11b/g Module for
Wireless Sensor Networking



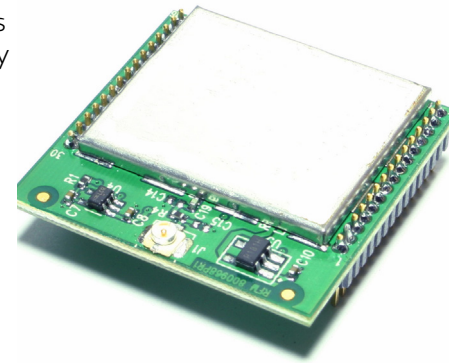
Now supports 11 MB/s
and Enterprise Security



No programming



No processor needed



Commercial and industrial sensing applications

Energy management ■ Manufacturing asset management ■ Food Safety ■ Environmental

cold chain ■ Security and safety ■ Many more applications

The WSN802G is a 2.4 GHz IEEE 802.11b/g radio transceiver module that enables OEMs to build battery-powered wireless local area networking (WLAN) and sensor monitoring solutions for the global market. The WSN802G delivers an exceptionally low power profile and long battery life capabilities in a fully functional, certified radio module that is easily interfaced to existing 802.11b/g infrastructure. Just add a battery, antenna, and sensor to create a complete wireless sensor node.

Leverages existing Wi-Fi 802.11b/g infrastructure

- IEEE 802.11b/g standards-based radio ensures interoperability with other 802.11b/g compatible devices and existing WLAN networks
- RF Data rates from 1Mb/s to 11Mb/s handle a wide range of commercial and industrial sensing applications
- 802.1x and WPA2-Enterprise security meet the most stringent data security requirements
- Low cost provides substantial cost savings without compromising features or radio performance

Low power - up to 5-year battery life on a single AA Lithium battery

- The WSN802G's ability to sleep between active periods provides low average power consumption
- <8 uA Sleep Current provides years of battery operation
- <200mA Active Power Current enables battery operation:

Configurable automatic I/O reporting

- Interval timer triggers
- Interrupt triggers
- ADC level triggers

Murata's advanced networking features and robust frequency hopping technology, along with a full 24-bit CRC and ARQ error detection and correction scheme, provide an extremely reliable radio with sophisticated features at a remarkably low price.

- <8 uA Sleep Current provide• up ta 5 year• battery life on a single AA lithium battery
- <200mA Active Power Current enable• battery operation
- 10mW RF Power
- 801.1x and WPA2-Enterprise security (NEW New Feature)
- Ad Hoc mode operation (NEW New Feature)
- UART and SPI serial Interfaces (NEW New Feature)
- RF data rates from 1 Mb/s to 11 Mb/s (NEW 11 Mb/s Is New Feature)
- Small Size and Light Weight @ 1.0 X 1.05 inches
- Typical Transmission Range (Indoor 50 meters / Outdoor 250 meters)
- Timer- and Event-Triggered Auto-Reporting Capability
- Analog, Digital and Serial I/O for Sensor and Data Appllcatlon•
- -40 to +85 C Operating Temperature Range
- FCC, ETSI and IC Certified for Unlicensed Operation



Full WSN functionality including analog and digital I/O plus auto-reporting and sleep

While many applications require wireless transmission of serial data, more and more applications need to collect sensor data from devices with analog and digital outputs. The WSN802G supports both types of applications. With both a standard UART serial port supporting standard baud rates, a configurable Master /Slave SPI port, and a collection of 2 ADC Inputs, 2 PWM outputs, 4 GPIOs, the WSN802G is well suited for any sensor application. When you add the WSNBD2G's ability to auto-report sensor data and to sleep between reports, you get a low power 802.11b/g radio that is suitable for battery operation.

Fast-Track your design -- order your development kit

- Everything you need to get a wireless sensor node up and running in minutes
- Development board (featured in the image above) provides a simple means to interface to your device
- Utility programs that demonstrate network operation and performance
- Documentation, including source code to the utility programs to speed integration of the WSN802G into your product.

WSN802GDK contains:

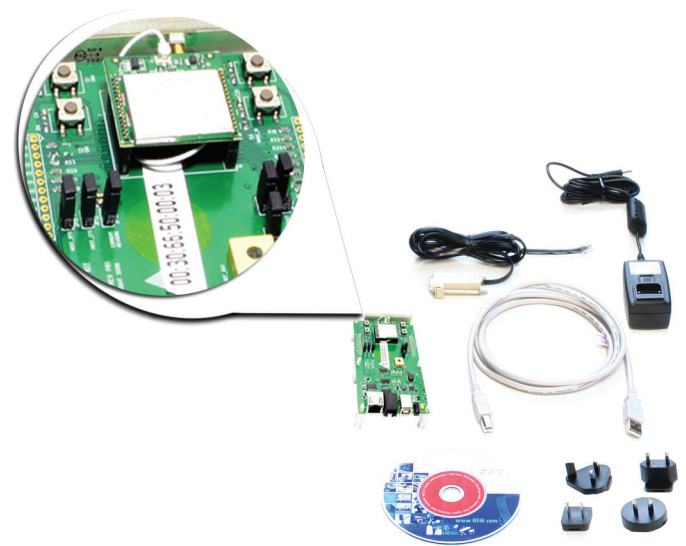
- 1 WSN802G module
- 1 WSN802G development board
- Serial and USB cables
- 9V Battery and wall-mount power supply
- Antenna
- Program CD with software and manuals
- Quick start guide

WSN802GDK-A contains:

- Everything in the WSN802GDK kit
- PLUS 1 wireless router

How To Buy

Murata products are sold through a world-wide network of sales reps and distributors. Go to the Murata website at www.murata.com and visit the "Products - Wireless Connectivity Platforms" section to locate a sales/distribution partner near you.



The GainSpan trademark belongs to GainSpan, Inc.

The Wi-Fi trademark belongs to the Wi-Fi Alliance

Looking for pricing, stock, or lifecycle information?

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- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management