



# 900 MHz Frequency Hopping Multi-Function Wireless Remote

The DNT900 is a low cost, long range, multi-purpose, multi-function 900MHz frequency hopping OEM RF module. It supports both analog and digital I/O and serial data and has the ability to autoreport and sleep between reports, reducing power consumption. The DNT900 provides a selection of over-the-air data rates and transmit power levels allowing one module to work for many products and giving the designer insurance that the radio performance can be tweaked if needed when the design is finished without having to design in another radio.

# Wide range of applications

The long range, multi-purpose and multi-function of the DNT900 make it ideal for a wide variety of industrial radio applications:

- SCADA
- Industrial automation
- Wireless sensor networks
- Agriculture

- Industrial remote control
- Scoreboards
- Building automation and control
- Irrigation control

- Wireless robotics
- Oil and Gas
- Electronic signs
- Pipeline monitoring

#### **DNT900** features

- 900 MHz Frequency Hopping Spread Spectrum Transceiver
- Point-to-Point and Point-to-Multipoint Network Topologies
- Transmitter Power Configurable from 1 mW to 1 W
- RF Data Rate Configurable from 38.4 to 500 kbps
- Serial Port Rate up to 460.8 kbps for Streaming Applications
- 128-Bit AES Encryption
- Separate Serial Port for Diagnostics
- Analog and Digital I/O for Sensor Applications
- FCC and Canadian IC Certified for Unlicensed Operation
- Sleep modes and auto-reporting
- Unlimited number of nodes

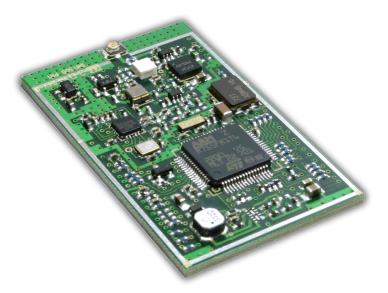
# Total configurability including RF data rate and RF transmit power

The DNT900 provides the OEM designer complete flexibility over the radio's performance. Rather than having to fit the application to the radio, the DNT900 lets the designer fit the radio to the application. Starting with multiple RF data rates and RF transmit power, the DNT900 provides total flexibility in how fast the radio hops, how bandwidth is allocated between remotes and the base, support for co-located networks, and a variety of sleep modes, to name but a few of the configuration options available.

And when designers have multiple products needing different radio performance, they can use the DNT900 for all the products by simply configuring the DNT900 for the desired performance. There is no need to learn about or stock multiple radio modules.

#### Analog and digital I/O for serial and sensor data

The DNT90 supports wireless applications needing to send over-the-air analog and digital data and/or serial data. The DNT 90 offers 3 analog inputs and 6 GPIOs to not only report signal status but also to initiate actions without the need for intelligence. With a standard UART serial port supporting standard baud rates plus a collection of 3 ADC points, 2 DAC outputs and 6 GPIOs, the DNT90 is well suited for any sensor applications. Its ability to auto report sensor data and to sleep in between reports makes the DNT90 suitable for battery 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 DNT900 supports both types of applications. With both a standard UART serial port supporting standard baud rates as well as a collection of 3 ADC inputs, 2 DAC outputs and 6 GPIOs, the DNT900 is well suited for any sensor application. When you add in the DNT900's ability to auto-report sensor data and to sleep in between reports, you get a low power radio that is suitable for battery operation.

## Fast-track your design -- order a developer kit

- Everything you need to get a wireless link going in less than 10 minutes
- Two development boards providing a simple means to interface to your device and showcasing DNT900 features
- Utility programs that demonstrate network operation and performance
- Documentation, including source code to the utility programs, to speed integration of the DNT900 into your product

#### **DNT900DK** contains:

- 2 DNT900 modules with pins
- 2 DNT900 development boards
- 2 USB and 2 Serial Cables
- 9V Batteries and Wall-mount Power Supplies
- Antennas and RF Cables
- Program CD with software and manuals
- Quick Start Guide



#### **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.