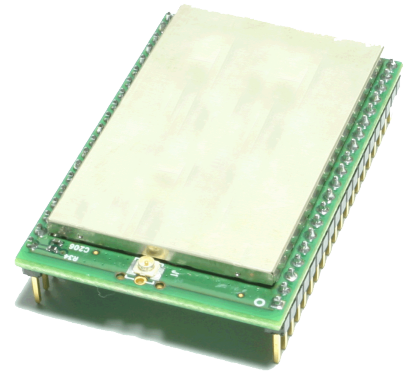




Now with tree routing  
and configurable SPI



No programming needed



# DNT Series

900 MHz • DNT900/2.4 GHz • DNT2400

## Highly configurable FHSS

Exceptional performance at very low cost

Multi-function, multi-purpose, long-range

## Wireless telemetry and wireless sensor networks

- SCADA
- Industrial Automation
- Wireless sensor networks
- Industrial remote control
- Scoreboards and electronic signs
- Building automation/control
- Irrigation Control
- Wireless robotics

Comprised of the DNT900 (900 MHz) and the DNT2400 (2.4 GHz), the DNT Series products from Murata are low-cost, long-range, multi-purpose, multi-function frequency hopping OEM RF modules. The DNT Series supports both analog and digital I/O and serial data. They have the ability to auto-report and sleep between reports, thereby reducing power consumption. With a selection of over-the-air data rates and transmit power levels, the DNT Series allows one module to work for many products to provide flexibility to the designer to modify or tweak if needed after the design is completed ... without having to design in another radio..

### Highly configurable for maximum flexibility (RF data rate and RF transmit power)

- RFM proprietary frequency hopping technology provides robust communications reliability, provides interference rejection and minimizes multipath fading.
- DNT2400 @ 2.4 GHz ISM band with configurable RF transmit power of 1 mW to 100 mW can be used license-free world-wide
- DNT900 @ 900 MHz ISM band and configurable RF transmit power of 1 mW to 1 W delivers longest range and ability to penetrate buildings or dense materials, making it highly suitable for industrial facilities or outdoor applications without clear line-of-sight
- AES-128 Encryption allows the most sensitive data to be securely sent wirelessly
- Low cost provides substantial cost savings over existing long-range radios without compromising features or radio performance
- Flexible - OEM designers no longer have to become familiar with nor stock multiple radio modules

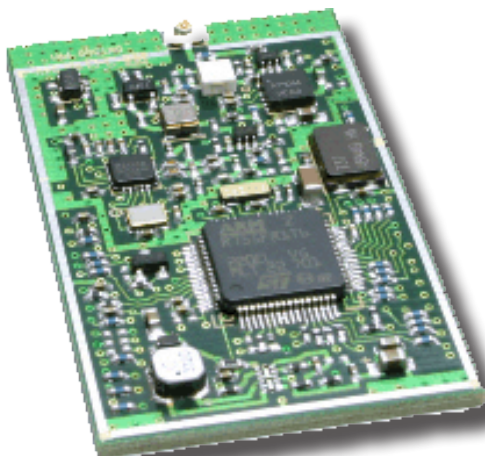
### Highly reliable and secure FHSS capabilities at very low cost

- The DNT Series enables the OEM designer to fit the radio to the application rather than having to fit the application to the radio  
Configuration options include:

- RF Data Rates
- RF Transmit Power

- Frequency Hopping Rate
- Bandwidth Allocation

- Co-located Network Support
- Sleep Modes



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.

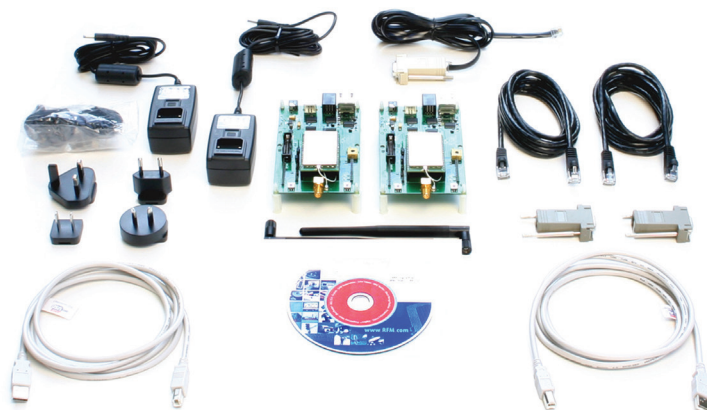
- 900 MHz and 2.4 GHz Frequency Hopping and Spread Spectrum Transceivers
- Point-to-Point and Point-to-Multipoint network topologies
- DNT900 transmitter power configurable from 1 mW to 1W
- DNT2400 Transmitter power configurable from 1mW to 1W
- RF data rate configurable from 38.4 to 500 kb/s
- Serial port rate up to 460.8 kb/s for streaming applications
- 128-bit AES encryption
- Separate serial port for diagnostics
- Analog and digital I/O for sensor applications
- Tree routing with Fail Over (new feature)
- Software-configurable SPI port (new feature)
- Sleep modes and auto-reporting
- CSMA modes for unlimited number of nodes
- TDMA mode for guaranteed bandwidth
- FCC, ETSI, and IC certified for unlicensed operation
- DNT900 and DNT2400 are pin-for-pin compatible to each other
- Tree routing with Fail Over (new feature)

## 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 DNT Series module features
- Utility programs that demonstrate network operation and performance
- Documentation, including source code to the utility programs, to speed integration of the DNT series module into your product

## DNT Series dev kits contain:

- 2 DNT2400 or 2 DNT900 modules with pins
- 2 DNT2400 or 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](http://www.murata.com) and visit the "Products - Wireless Connectivity Platforms" section to locate a sales/distribution partner near you.