

# DN-90G Low Cost FHSS Serial Modem

## 900 MHz multi-purpose serial modems

The DN-90G Series wireless modems are a versatile line of low cost general purpose serial modems operating in the 900 MHz ISM unlicensed band. The serial modems provide wireless replacement for RS-232 cable in office and factory environments, and can also serve as a platform for multi-drop RS-485 networks in industrial settings

Built around and powered by Murata's field proven FHSS DNT90 radio modules, these frequency hopping wireless modems offer exceptional rejection to multi-path fading and immunity from jamming from other RF signals, thus offering robust and reliable communications in harsh and hostile industrial environments.

The DN-90G Serial modems are available with RS-232, USB and RS-485 interfaces in ruggedized metal enclosures with double sided flanges and can be mounted horizontally or vertically, yet look right at home on a desk or in an office. Supplied with a 2 dBi reverse SMA dipole antenna, these units are simple to install.

The DN-90G Series modems provide point-to-point, point-to-multipoint, peer-to-peer and store-and-forward connectivity. The modems can also serve as base stations or remote stations for DNT90 radio networks. For more demanding applications, the DN-90G series modems are user configurable to support a wide variety of different performance needs.

Combined with the high performance, versatility and small size, these modems come complete with antennas, cables and universal power supplies and are priced to fit any budget to deliver unsurpassed value.

### Top Features

- RF Data Rates: 100 Kbps
- Transmitter Power: 40, 150 mW
- 128-Bit AES Encryption for enhanced data security
- Available with RS-232, USB and half duplex RS-485 interfaces
- FCC and Canadian IC Certified

### Key Benefits

- Easy installation in a wide variety of applications
- Provides low cost robust communications
- Excellent range from 10s of meters to kilometers
- Low to moderate data rates
- Operates in noisy RF environments
- Multiple remote connectivity and co-located networks coverage



## SPECIFICATION

Modulation:	FHSS (Frequency Hopping Spread Spectrum)
Frequency:	902.75 – 927.25 MHz
Transmit Power:	40, 150 mW
RF Data Rates:	100 Kbps
Receiver Sensitivity:	-100 dBm 10-5 BER
Data Encryption:	128-Bit AES
Network:	Point to Point, Point to Multipoint, Peer-to-Peer, Store-and-Forward
Environmental:	-40°C to +85°C , 10 - 90% humidity, non-condensing
Power Supply:	+9 V to +48 VDC
Dimensions:	3.3 x 3.2 x 1 inches (84.6 x 82.0 x 25.4 mm)
Certification:	FCC and Canadian IC certified

## HOW TO BUY

Murata products are sold through a world-wide network of manufacturer's reps and distributors. Go to the Murata website at [www.murata.com](http://www.murata.com) and visit the "How to Buy" section to locate a sales / distribution partner near you.

Part Number	Description
DN-90G	Multi-purpose 900 MHz FHSS wireless data modem with RS-232. Communicates through a serial port with flexible data rates. Supports point-to-point, point-to-multipoint, peer-to-peer and store-and-forward topologies
DN-90GI	Multi-purpose 900 MHz FHSS wireless data modem with RS-485. Communicates through a serial port with flexible data rates. Supports point-to-point, point-to-multipoint, peer-to-peer and store-and-forward topologies
DN-90GU	Multi-purpose 900 MHz FHSS wireless data modem with USB. Communicates through a serial port with flexible data rates. Supports point-to-point, point-to-multipoint, peer-to-peer and store-and-forward topologies