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INNOVATOR IN ELECTRONICS

HN-550

2.4GHz Frequency Hopping Wireless Data Modem

Features:
- *2.4GHz Frequency Hopping Spread Spectrum Technology*
- *460Kbps over the air and 230.4Kbps I/O data rates*
- *86 Hopping Channels*
- *FCC Certified*
- *2dB rubber whip antenna*
- *RS-232 asynchronous serial interface*

Benefits:
- *Exceptional immunity to multipath fading and jamming*
- *Supports high speed applications needing long range*
- *Co-location of multiple networks without interference*
- *License-free application*
- *Cost-effective, simple installation*
- *Connects to standard PC Serial ports*

HN-550

The HN-550 is a 2.4GHz frequency hopping spread spectrum wireless data modem intended for demanding wireless data systems integration projects. The modem features high data rates (460Kbps) and range indoors of up to 1000 feet. The HN-550 can be used to build point-to-point or point-to-multipoint networks, with either half- or full-duplex I/O rates of 230.4Kbps, asynchronous via the RS-232 serial port (DB-9).

The HN-550 also has a built-in rechargeable battery pack that operates as a UPS or allows temporary operation remote from AC power. Front panel LED indicators provide information on modem and communications status. Connection to the HN-550 is through a standard DB-9 connector supporting an RS-232 interface. The HN-550 modem comes complete with a rubber whip, right angle 2dB omni-directional antenna and wall-mount power supply.

Specifications

	HN-550
Frequency Band	2401-2480 MHz
Operating Range	1000' indoors
Licensing	Unlicensed operation under FCC Part 15, ETS300.328
Number of Channels	86, 50 software selectable
Error Detection and Correction	24 bit CRC and ARQ
I/O Data Rates	Up to 230.4 Kbps, software selectable
RF Channel Rate	460 Kbps
Serial Data Interface	Async. RS-232
RF Bandwidth	750 KHz
Modulation Type	GMSK
Output Impedance	50 ohms
Network Protocol	ARQ: TDMA
Transmit Power	+18dBm
Receive Sensitivity	-93 dBm for 10-5 BER
Supply Voltage	5 Vdc

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Mechanical Specifications

	HN-550
Antenna	4" Rubber Whip
Case Materials	Ruggedized aluminum
Dimensions (mm)	160 x 115 x 30
Weight excl. cable	378g
Antenna Connector	Reverse SMA
Data Connector	9-Pin D
Power Connector	2 Terminal Connector

Environmental Specifications

Temperature Range	-40°C to +70°C
Humidity	95% at +40°C, Non-condensing

Versatility

The HN-550 is a versatile, multi-purpose 2.4GHz frequency hopping spread spectrum wireless data modem. Built around the WIT2450 radio, the HN-550 comes complete with an antenna, serial cable and graphical configuration program. Communication with the HN-550 is through an asynchronous serial port supporting a standard RS-232 interface and configurable to most standard baud rates. The HN-550 communicates over the air at 460Kbps and supports both point-to-point and point-to-multipoint networks. With a rugged yet stylish enclosure, the HN-550 is perfect for desktop use. The HN-550 transmits at either +8dBm or +18dBm.

Useability

Based on the Murata WIT2450 spread spectrum frequency-hopping radio, the HN-550 has exceptional multipath fade rejection as well as immunity to jamming. The WIT2450 is based on field proven technology that delivers robust, reliable real world performance.

The HN-550 is FCC, CE & IC certified and operates in the license-free 2.4GHHz band.

The HN-550 is an invaluable tool for real-time site surveys and proofing of a proposed wireless system concept. Its small size and built-in battery pack make it easy to carry and use on-site.

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