



HN-510

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
- 75 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

The HN-510 is a 2.4GHz frequency hopping spread spectrum wireless data modem intended for demanding wireless data systems integration projects. The modem features a high data rate (460Kbps) and an indoor range of up to 1000 feet. The HN-510 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-510 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-510 is through a standard DB-9 connector supporting an RS-232 interface. The HN-510 modem comes complete with a rubber whip, right angle 2dB omni-directional antenna and wall-mount power supply.



HN-510

Specifications

	HN-510
Frequency Band	2401-2480 MHz
Operating Range	1000' indoors
Licensing	Unlicensed operation under FCC Part 15, ETS300.328
Number of Channels	75, 15 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

Mechanical Specifications

	HN-510
Antenna	4" rubber whip
Case Materials	ABS plastic
Dimensions (mm)	130 x 95 x 25
Weight excl. cable	275g
Antenna Connector	Right angle reverse SMA
Data Connector	9-pin D
Power Connector	2 Pin circular DIN connector

Environmental Specifications

Temperature Range	0°C to +50°C
Humidity	95% at +40°C, non-condensing



Versatility

The HN-510 is a versatile, multi-purpose 2.4GHz frequency hopping spread spectrum wireless data modem. Built around the WIT2410 radio, the HN-510 comes complete with an antenna, serial cable and graphical configuration program. Communication with the HN-510 is through an asynchronous serial port supporting a standard RS-232 interface and configurable to most standard baud rates.

The HN-510 communicates over the air at 460Kbps and supports both point-to-point and point-to-multipoint networks. With a rugged yet stylish ABS plastic enclosure, the HN-510 is perfect for desktop use. The HN-510 transmits at either +8dBm or +18dBm.

Reliability

Based on the RFM WIT2410 spread spectrum frequency-hopping radio, the HN-510 has exceptional multipath fade rejection as well as immunity to jamming. The WIT2410 is based on field proven technology that delivers robust, reliable, real-world performance.

The HN-510 is FCC, CE & IC certified and operates in the license-free 2.4GHz band.

The HN-510 is an invaluable tool for real-time site surveys and for proofing of a proposed wireless system concept. Its small size and built-in battery pack make it easy to carry and use on-site.