DEVELOPER KIT
(Info: click here)

HN-591

900MHz Frequency Hopping Wireless Data Modem

Features:

- ***900MHz Frequency Hopping Spread Spectrum Technology***
- ***172.8Kbps over the air and 115Kbps I/O data rates***
- ***54 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 PC Serial ports***



HN-591

The HN-591 is a 900MHz, frequency hopping spread spectrum wireless data modem intended for demanding wireless data systems integration projects. -The modem can be used to build point-to-point or point-to-multipoint networks, and has a built-in rechargeable battery pack that operates as a UPS or allows temporary operation removed from AC power. Front panel LED indicators provide information on modem and communications status. Connection to the HN-591 is through a standard DB-9 connector supporting an RS-232 interface. HN-591 modems come complete with a rubber whip style, right angle 2dB omni-directional antenna and wall-mount power supply.

Specifications

	HN-591
Frequency Band	902 to 927 MHz
Operating Range	Indoor: 1000'+ Outdoor: >20 miles with omni-directional antenna
Licensing	FCC Part 15.247, license free
Number of Channels	54
Error Detection and Correction	24 bit CRC and ARQ
I/O Data Rates	Up to 115.2 Kbps, software selectable
RF Channel Rate	172.6 Kbps
Serial Data Interface	Async. RS-232/USB
RF Bandwidth	172 KHz
Modulation Type	GFSK
Output Impedance	50 ohms
Network Protocol	Dynamically Assigned TDMA with ARQ
Transmit Power	500mW, 100mW, 10mW, software selectable
Receive Sensitivity	-104 dBm for 10-5 BER
Supply Voltage	9-30 Vdc

©2008 by RF Monolithics, Inc.

Mechanical Specifications

	HN-591
Antenna	2dB 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





©2008 by RF Monolithics, Inc.

Versatility

The HN-591 is a versatile, multi-purpose 900MHz frequency hopping spread spectrum wireless data modem. Built around the WIT910 radio, the HN-591 comes complete with an antenna, serial cable and graphical configuration program. Communication with the HN-591 is through a 115.2Kbps asynchronous serial port supporting a standard RS-232 interface and configurable to standard baud rates between 9600 and 115.2K baud.

The HN-591 communicates over the air at 172.6Kbps and supports both point-to-point and point-to-multipoint networks. With a rugged yet stylish enclosure made of aluminum, the HN-591 is perfect for desktop use. The HN-591D has software-selectable transmit power levels of 10mW, 100mW and 500mW.

Reliability

Based on the RFM WIT910 spread spectrum frequency-hopping radio, the HN-591 has exceptional multipath fade rejection as well as immunity to jamming. The WIT910 is based on field proven technology that delivers robust, reliable real world performance.

The HN-591 is FCC and IC certified and operates in the license-free 900MHz band.

©2008 by RF Monolithics, Inc.