

MHX1320

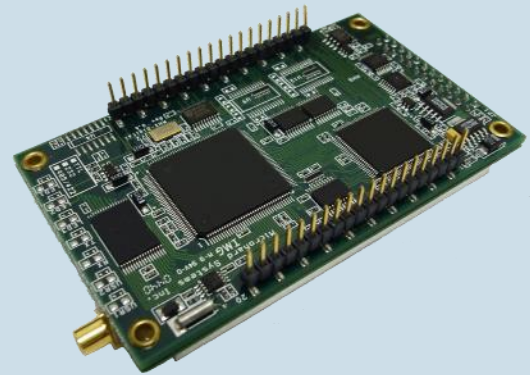


OEM UHF Frequency Hopping Modem

The MHX1320 is a 1350 to 1390 MHz UHF Frequency Hopping Wireless Modem, which can be optimized for long distance communications of over 60 miles (100km). MHX1320 radios offer the fastest communication over the longest distances.

Applications

- Unmanned Aerial/Ground Vehicles
- Drones
- Robotics
- Wireless Video, Telemetry
- DGPS
- Research & Development



Microhard Systems Inc.'s proprietary radio technology excels in the most demanding RF and physical environments.

The MHX1320 features robust, high speed, low latency, secure data communications. It has a full serial port and a separate diagnostics port for real-time diagnostics without interrupting data communications. Excellent noise figure, superior interference rejection, agile frequency synthesis, digital modulation, and matched filter detection are among the many advantages to using the MHX1320.

Features of the MHX1320

- Transparent, low latency link, providing up to 230 kbps continuous throughput
- Customizable to meet different emission bandwidths
- Easy migration from ISM band modem (MHX920A) with footprint compatibility.
- Wide temperature specification
- Supports Point-to-Point, Point-to-Multipoint, Peer-to-Peer, Store and Forward Repeater, TDMA, Multimaster
- Adjustable transmit power (100mW - 1W)
- Low power consumption in Sleep Mode and High Voltage Option
- 32 bits of CRC, selectable Forward Error Correction with retransmission
- Separate diagnostics port - transparent remote diagnostics and online network control

MHX1320 HV Option



Restricted Sale to Military, Government and Export to Qualifying Customers Outside Canada and USA.

MHX1320

Specifications



Frequency	1350 - 1390 MHz	Antenna Connector	MCX						
Channel Bandwidth	Depends on link rate	Environmental	-40°F - +185°F (-40°C - +85°C) 5-95% humidity, noncondensing						
Synthesizer Step	25 Hertz	Weight	Approx. 2.8oz. (80 grams)						
Selectable Channels	16,000 at 6.25kHz	Dimensions	Approx. 3.5" x 2.1" x .7" (89mm x 53.4mm x 17.8mm)						
Error Detection	32 bits of CRC, ARQ	Sale Restriction	Restricted Sale to Military, Government and Export. Export Means Qualifying Customers Outside Canada and USA.						
Encryption	Optional (Canada & USA only. NOT AVAILABLE for export, see -AES option)	<h3>Order Options</h3> <table border="1"><tr><td>-AES</td><td>128-AES Encryption (Canada & USA only. NOT AVAILABLE for export)</td></tr><tr><td>-HV</td><td>HV Option - High input voltage (9V - 30VDC) with RS232/485/422 Drivers</td></tr><tr><td>-F1</td><td>1260 - 1290 MHz Operational Frequency</td></tr></table>		-AES	128-AES Encryption (Canada & USA only. NOT AVAILABLE for export)	-HV	HV Option - High input voltage (9V - 30VDC) with RS232/485/422 Drivers	-F1	1260 - 1290 MHz Operational Frequency
-AES	128-AES Encryption (Canada & USA only. NOT AVAILABLE for export)								
-HV	HV Option - High input voltage (9V - 30VDC) with RS232/485/422 Drivers								
-F1	1260 - 1290 MHz Operational Frequency								
Range	60+ miles (100+ km) (dependant on link rate and line of sight)								
Sensitivity	-107dBm @ 115.2kbps link rate -115dBm @ 19.2kbps link rate								
Output Power	100mW - 1W (20-30dBm)								
Form Factor	MHX920A compatible								
Serial Interface	RS232/RS485/RS422 TTL Driver Level (see -HV option)								
Serial Baud Rate	300bps to 230.4kbps								
Link Rate	19.2 kbps - 230.4kbps								
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer, TDMA, Multimaster								
Signals Interface	RxD1, TxD1, RTS, CTS, DCD, DSR, DTR, Rx/D2, Tx/D2, RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode								
Diagnostics	Battery Voltage, Temperature, RSSI, and remote diagnostics								
Rejection	Excellent strong signal interference & rejection characteristics								
I/O Voltage (user selectable)	3.3VDC to 5.5VDC; RS232/485/422 levels (See -HV option)								

Contact Information

Copyright 2010 Microhard Systems Inc.
Specifications subject to change without notice.

Microhard Systems Inc.
150 Country Hills Landing N.W.
Calgary, AB, Canada T3K 5P3

Email: info@microhardcorp.com
Tel: (403) 248-0028
Fax: (403) 248-2762



www.microhardcorp.com