

# Spectra 320



## UHF Frequency Hopping Modem

The Spectra 320 is a 310 to 390 MHz UHF Frequency Hopping Wireless Modem, which can be optimized for long distance communications of over 60 miles (100km). Spectra 320 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 Spectra 320 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 Spectra 320.

### Features of the Spectra 320

- 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



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

# Spectra 320

# Specifications



<b>Frequency</b>	310 - 390 MHz	<b>Antenna Connector</b>	RP-TNC Female Bulkhead
<b>Channel Bandwidth</b>	Depends on link rate	<b>Environmental</b>	-40°C - +85°C 5-95% humidity, noncondensing
<b>Synthesizer Step</b>	25 Hertz		
<b>Selectable Channels</b>	16,000 at 6.25kHz		
<b>Error Detection</b>	32 bits of CRC, ARQ	<b>Weight</b>	420g (.93lbs)
<b>Encryption</b>	Optional (Canada & USA only. NOT AVAILABLE for export, see -AES option)		
<b>Range</b>	60+ miles (100+ km) (dependant on link rate and line of sight)	<b>Dimensions</b>	Approx. 4.375" x 3.75" x 1.75" (112mm x 95mm x 45mm)
<b>Sensitivity</b>	-107dBm @ 115.2kbps link rate -115dBm @ 19.2kbps link rate		
<b>Output Power</b>	100mW - 1W (20-30dBm)	<b>Sale Restriction</b>	Restricted Sale to Military, Government and Export. Export Means Qualifying Customers Outside Canada and USA.
<b>Serial Interface</b>	RS-232/RS485/RS422		
<b>Serial Baud Rate</b>	300bps to 230.4kbps		
<b>Link Rate</b>	19.2 kbps - 230.4kbps		
<b>Operating Modes</b>	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer, TDMA, Multimaster		
<b>Signals Interface</b>	RxD1, TxD1, RTS, CTS, DCD, DSR, DTR, RxD2, TxD2, RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode		
<b>Diagnostics</b>	Battery Voltage, Temperature, RSSI, and remote diagnostics		
<b>Rejection</b>	Excellent strong signal interference & rejection characteristics		
<b>Input Voltage</b>	10-30VDC		

## Order Options

<b>-AES</b>	128-AES Encryption (Canada & USA only. NOT AVAILABLE for export)
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## Contact Information

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