

Nano Series - n1320



Miniature OEM UHF Wireless Modem

For size conscious consumers, consider the Nano Series with its small footprint and design flexibility. Operating in the 1350-1390 MHz range, the n1320 offers the reliability, features, and performance of our larger modems, yet can fit almost anywhere! Fully compatible with MHX series radio modems!

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 Nano Series features robust, high speed, low latency, secure data communications. The n1320 has full serial and diagnostics data capabilities and is 'radio compatible' with MHX1320 modems! The n1320 offers excellent noise figure, superior interference rejection, agile frequency synthesis, digital modulation, and matched filter detection. The n1320 can support 1.2Mbps and higher!

Features of the n1320

- Supports up to 1.2Mbps (higher rates available, contact Microhard for details)
- Customizable to meet different emission bandwidths
- Quad Filter Stage provides Extreme Noise & Interference Rejection
- Supports Point-to-Point, Point-to-Multipoint, Store and Forward Repeater, TDMA
- Maximum allowable transit power (1W)
- Low Power consumption in Sleep and Sniff modes
- 32 bits of CRC, selectable Forward Error Correction with retransmit
- Separate diagnostics port—transparent remote diagnosis and online network control
- Very Small Footprint
- Wide temperature specification

Nano Interface Card



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

n1320

Specifications

Frequency	1350-1390 MHz	Connectors:	Antenna Data	MMCX
Spreading Method	Frequency Hopping / DTS			60 Pin OEM Header
Band Segments	Selectable via Freq Restriction	Environmental		-40°F - +185°F (-40°C - +85°C) 5-95% humidity, noncondensing
Error Detection	32 bits of CRC, ARQ	Weight		Approx. 0.7 oz. (19 grams)
Encryption	Optional (See -AES option)	Dimensions		Approx. 1.25" x 2.0" x .25" (32mm x 51mm x 6.35mm)
Range	60+ miles (100+ km) (dependant on link rate and line of sight)	Sale Restriction		Restricted Sale to Military, Government and Export. Export Means Qualifying Customers Outside Canada and USA.
Sensitivity	n1320F -108 dBm @ 172 kbps link rate	Order Options		
Output Power	100mW - 1W (20-30dBm) (See order options)	n1320S	- 19.2 kbps link rate	
Serial Interface	TTL	n1320F	- 115, 172, 230 kbps link rate	
Serial Baud Rate	- Up to 230.4 kbps asynchronous - Up to 3.2 Mbps synchronous	n1320T	- Up to 1.2 Mbps link rate	
Link Rate	Up to 1.2Mbps (higher rates available, contact Microhard for details)	-AES	128 bit-AES Encryption	
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer	-AES256	256 bit-AES Encryption	
Signals Interface	RxD1, TxD1, RTS, CTS DCD, DSR, DTR, RxD2, TxD2, RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode	-2W	Up to 2 Watts Output Power. (Government, Export Only. Not for commercial / Industrial use) Contact Microhard for details.	
Diagnostic Port	RS232: RxD, TxD			
Diagnostics	Battery Voltage, Temperature, RSSI, Real-time event logging and remote diagnostics			
Rejection	Quad Filter Stage provides excellent strong signal interference & rejection characteristics			
Core Voltage	3.3VDC Nominal (+/- 0.3V)			

Contact Information

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