

Spectra 3420



3.4 GHz S-Band Wireless Modem

The Spectra 3420 is a 3.4 GHz S-Band Frequency Hopping Wireless Modem, which can be optimized for long distance communications of over 40 miles (70km). Spectra 3420 radios offer the fastest communication over the longest distances.

Applications

- Licensed Band SCADA
- WiMAX Band Operation
- Unmanned Vehicles / Drones
- Wireless Video, Telemetry
- DGPS
- Research & Development
- Robotics

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



Up to 2 Watts!

The Spectra 3420 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 3420.

Features of the Spectra 3420

- Transparent, low latency link, providing 230 kbps continuous throughput
- Customizable to meet different emission bandwidths
- Industrial Grade - extended temperature specification
- Supports Point-to-Point, Point-to-Multipoint, Peer-to-Peer, Store and Forward Repeater, TDMA, Multimaster
- Output Power adjustable from 100mW to 2W
- 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



Sale Restriction: See reverse for product availability and country selection

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Specifications



Frequency	3300 - 3500 MHz	Connectors	Antenna	RP-TNC Female Bulkhead
Channel Bandwidth	50kHz to 400kHz		Data	Female DE9
Synthesizer Step	200Hz		Diagnostic	Locking screw connector RJ-45
Spreading Method	Frequency Hopping	Environmental	-40°F to 185°F (-40°C to +85°C) 5-95% humidity, noncondensing	
Error Detection	32 bits of CRC, ARQ	Weight	Approx. 0.92lbs (420g)	
Encryption	Optional (Canada & USA only. NOT AVAILABLE for export, see -AES option)	Dimensions	Approx. 4.375" x 3.75" x 1.75" (111mm x 95.3mm x 44.5mm)	
Range	40+ miles (70+ km) (dependant on link rate and line of sight)	Enclosure	Extruded Aluminum	
Output Power	Export: 100mW - 1W (20 - 30dBm) Non-Export: 100mW - 2W (20-30 dBm)	Mount	Panel Mount	
Sensitivity	-106dBm @ 172.8 kbps -114dBm @ 19.2 kbps	Order Options		
Serial Interface	RS-232/RS485/RS422	-DIN	DIN rail mount kit	
Serial Baud Rate	300bps to 230.4kbps	-SL	Extended sensitivity / SLOW Mode 19.2kbps - 230.4kbps	
Link Rate	19.2 kbps - 230.4kbps (See Order Options)	-C1D2	Class 1 Div 2 (for use in hazardous environments)	
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer, TDMA, Multimaster	-AES	128-AES Encryption (Canada & USA only. NOT AVAILABLE for export)	
Signals Interface	RxD1, TxD1, RTS, CTS, DCD, DSR, DTR, RxD2, TxD2, RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode	Sale Restriction		
Diagnostics	Battery Voltage, Temperature, RSSI, and remote diagnostics	Export ONLY	128-bit AES Encryption NOT AVAILABLE for export outside of Canada and USA. 1 Watt only	
Rejection	Excellent strong signal interference & rejection characteristics	MHSxxxxxx	xxx3420-EXP	
Input Voltage	9-30VDC		Outside Canada and USA - Commercial 3.5GHz WiMAX bands	
		Canada and USA Military/Government ONLY		
		MHSxxxxxx	xxx3420-2W-AES 2W, 128-bit AES	

Contact Information

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