

IP920 serial data and IP/Ethernet bridge is powered by a reliable high speed 900MHz FHSS radio. It provides robust wireless transportation for simultaneous serial data and IP/Ethernet packets to extend serial data devices and corporate IP networks.



Applications:

- IP/Ethernet Wireless Extension
- Legacy Networks / Devices Migration
- Video / Voice over IP
- SCADA (PLCs, Modbus, HART)
- Military, Unmanned Systems
- GPS Vehicle Data/Tracking, DGPS
- Electric, Oil, & Gas Utilities/Metering
- Display Signs

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

As a complete wireless solution for integrating industrial ethernet and serial devices into IP/Ethernet networks; the IP920 allows ethernet devices to share high speed wireless media and provides a wireless gateway for network applications to access serial devices. IP920 also features flexible maintenance utilities and network management facilities.

Features of the IP920

- Standard 340kbps wireless link rate
- Long-range, high-speed communications with excellent receiver sensitivity and robust frequency hopping
- User-selectable Tx power from 100mW to 1W (2W option for military, see option 150)
- Two serial ports with RS232/485/422
- Point-to-point, Point-to-Multipoint, Repeater and Peer-to-Peer
- Bringing industrial data into IP/Ethernet networks
- Advanced serial port supports legacy serial devices including RTS, CTS, DSR, DTR and DCD signals
- User interface through local console, telnet, and web browser
- Network management capability with SNMP
- Local and remote firmware upgrading through FTP
- Sleep mode

Front/Back View



IP920

Specifications

Frequency	902 - 928 MHz	Power Supply	9VDC to 30VDC
Spread Spectrum	Frequency Hopping	Current (12VDC)	
Link Rate	345kbps	Sleep	6 mA
Hopping Patterns	automatically generated	Transmit	600 mA
Hopping Channels	50/Pattern	Receive	95 mA
Error Detection	32bit CRC, ARQ	Connectors	
Data Encryption	128 bit / 256 AES(non-export)	Antenna	Reverse gender TNC
Range	+60 miles (line of sight)	Data	RS-232 DB-9F Locking terminal connector RJ-45
Sensitivity	-106 dBm	Environment	-40 °C to +75 °C 5-95% non-condensing
Output Power	100mW to 1W (20~30dBm)	Weight	Approx. 420 grams (0.92 lbs)
System Gain	136dB	Dimensions	4.755" x 3.75" x 1.75"
Serial Port	RS232: RxD, TxD, RTS, CTS, DCD, DSR, DTR RS422: Tx+, Tx-, Rx+, Rx- RS485: 4 wire/2 wire Baud rate: 300bps to 230.4kbps Throughput: 230.4kbps	Enclosure	Extruded aluminum
Ethernet	10/100 BaseT IEEE 802.3	Mount	Panel mount
Network Protocols	TCP, UDP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, Serial over IP	<h2>Order Options</h2>	
Management	Local Serial Port Console, Telnet, WebUI, SNMP, FTP Up- grade	Option 100	DIN rail mount Kit
Diagnostics	VSWR, Battery voltage, Temperature, RSSI, remote diagnostics	Option 200	Class 1 Div 2 (for use in hazardous environments)
Operating Modes	Point-to-Point, Point-to-Multipoint, Store&Forward Repeater, Peer-to- Peer	Option 150	2 Watt output power for military and export only
Rejection	Excellent Strong Signal Interfer- ence & Rejection Characteristics	Transmitter Type Acceptance upto 345kbps: FCC Part 15.247 IC RSS210	
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Contact Information

Microhard Systems Inc.
 #17, 2135-32nd Ave N.E.
 Calgary, AB, Canada T2E 6Z3
 email: info@microhardcorp.com
 Tel: (403) 248-0028
 Fax: (403) 248-2762



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Systems Inc.™**

www.microhardcorp.com