

# IP425



## 400 - 450 MHz Wireless Ethernet Bridge / Serial Gateway

*The IP425 Wireless Ethernet Bridge / Serial Gateway is powered by a reliable high-speed 400 - 450MHz FHSS radio. It provides robust wireless communication of simultaneous serial data and IP/Ethernet packets to extend serial data and IP networks.*

### Applications

- Unmanned Aerial Vehicles
- Unmanned Ground Vehicles
- Drones
- Wireless Video, Telemetry
- Research and Development
- Robotics

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



A complete wireless solution for integrating industrial Ethernet and serial devices into IP/Ethernet networks. The IP425 allows Ethernet devices to share high speed wireless media and provides a wireless gateway for network applications to access serial devices. The IP425 also features flexible maintenance utilities and network management facilities.

### Features of the IP425

- Standard 345 kbps wireless link rate
- Long range, high speed communications with excellent receiver sensitivity and robust frequency hopping
- Two serial ports: RS232 and RS232/485/422
- Supports Point-to-Point, Point-to-Multipoint, Repeater, Peer-to-Peer
- Adjustable transmit power (100mW - 1W)
- Bringing industrial data into IP/Ethernet networks
- User interface through local console, telnet, and web browser
- Network management capability with SNMP
- Local and remote firmware upgrading through FTP



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

# IP425

# Specifications



Frequency	400 - 450 MHz	Input Voltage	9-30VDC	
Spread Method	Frequency Hopping	Connectors	Antenna Data Ethernet	
Link Rate	345kbps			RP-TNC Female Bulkhead RS232 DB-9F, RJ45 Locking screw connector RJ-45
Error Detection	32 bits of CRC, ARQ			
Encryption	128-bit WEP/WPA (Canada & USA only. NOT AVAILABLE for export, see – AES option)	Environmental	-40°F to 160°F (-40°C to +70°C) 5-95% humidity, noncondensing	
Range	60+ miles (100+ km) line of sight	Weight	Approx. 0.92lbs (420g)	
Sensitivity	-104dBm @ 345kbps	Dimensions	Approx. 4.755" x 3.75" x 1.75" (121mm x 95.3mm x 44.5mm)	
Output Power	100mW - 1W (20-30dBm)	Enclosure	Extruded Aluminum	
System Gain	138dB w/Rubber Ducky Antennas 146dB w/6dBi Antennas	Mount	Panel Mount	
Serial Interface	RS232: RxD, TxD, RTS, CTS, DCD, DSR, DTR RS422: Tx+, Tx-, Rx+, Rx- RS485: 4-wire/2-wire	Sale Restriction	<b>RESTRICTED Sale to Military, Government, and Export. Export means qualifying customers outside Canada and USA.</b>	
Serial Baud Rate	300bps to 230.4kbps	<b>Order Options</b>		
Ethernet	10/100 BaseT IEEE 802.3	-DIN	DIN rail mount kit	
Network Protocols	TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, Serial over IP, QoS	-AES	128/256-bit AES Encryption, Secure Shell, HTTPS (Canada & USA only. NOT AVAILABLE for export)	
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer			
Management	Local Serial Port Console, Telnet, WebUI, SNMP, FTP Upgrade, RADIUS authentication			
Diagnostics	VSWR, Battery Voltage, Temperature, RSSI, and remote diagnostics			
Rejection	Excellent strong signal interference & rejection characteristics			

## 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 T2E 6Z3

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



[www.microhardcorp.com](http://www.microhardcorp.com)