

## 1W OEM 802.11b/g/n Serial/Ethernet WIFI Router

The pX2 is a miniature OEM, high power, 802.11b/g/n wireless router. Its feature rich design delivers a robust, secure, industrial strength wireless solution for critical data communications. The pX2 takes things to the next level by providing features such as Dual Ethernet Ports, RS232 Serial Communications Port and USB capabilities. The pX2 is ideal for custom integration projects and IoT applications

*802.11 b/g/n*

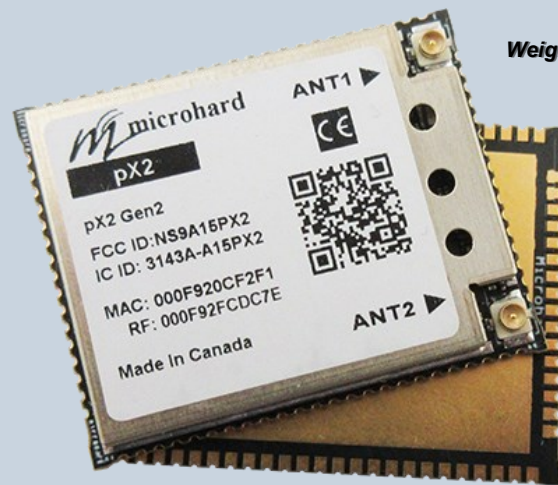
*1W / Excellent Sensitivity*

*USB 2.0 & RS232*

*Dual Ethernet*

*Industrial Temperature*

*IoT Applications*



**Weights only 5 grams!**

**1.3" X 1.05" X 0.13"**

## Features

- **High Power Tx (up to 1W) w/ Excellent Rx Sensitivity**
- **Up to 150 Mbps data rate**
- **Support for 802.11b/g/n Devices**
- **Firewall with ACL Security, Port Forwarding**
- **Full Scale Access Point, AP Station**
- **Multiple SSID Support**
- **Serial Gateway (RS232)**
- **Dual 10/100 Ethernet Ports**
- **RSSI LED pins for Antenna Alignments**
- **Industrial grade operating temperature (-40°C to +85°C)**
- **Administration via local console, telnet, web browser, SNMP**
- **Local and remote wireless firmware upgradable**

## Interface Options

**Motherboard**



**Enclosed**



# pX2

# Specifications

Frequency		2.4000 - 2.4835 GHz			
Radio Operation		IEEE 802.11 b/g/n			
Link Rate		Up to 150 Mbps			
Error Detection/Control		FEC/ARQ			
Encryption		WEP, WPA(PSK), WPA2(PSK), WPA+WPA2(PSK), WPA Enterprise (RADIUS), WPA2 Enterprise, WPA + WPA2 Enterprise			
Range		> 10 miles (16 km) (Antenna Dependant)			
Output Power		Up to 30dBm (1W)			
Ports		Serial Data/Console RS232 (Tx, RX, RTS, CTS, DTR, DSR) 300bps to 921kbps LAN Ethernet Dual 10/100BaseT IEEE802.3 USB 2.0			
Operating Modes		Full Scale Access Point, AP Station			
Management		Local Serial Port Console, Telnet, WebUI, SNMP, FTP Upgrade, TFTP, CLI (Command Line Interface)			
Network Advanced Protocols		TCP, UDP, TCP/IP, ARP, ICMP, DHCP, HTTP, SNMP, FTP, Serial over IP  IP Routing - static Routing, IP/RIPv1, IP/RIPv2, CIDR, ICMP, ARP NAT and Port Forwarding (Routing mode only).  Full 802.1Q VLAN Support, Access Control Lists (MAC & IP), MAC/IP Binding, Multiple SSID Support			
Diagnostics		Remote Diagnostics, Monitor Utilities (Ping, ARP table, DHCP active leases, CQ), Link Test			
Rejection		Excellent strong signal interference & rejection characteristics			
Input Voltage		OEM Motherboard/ENC Vcc: 3.3VDC (+/-0.3V) / Vpa: 3.3 to 5.0 VDC 7-30 VDC			
Connectors:		OEM Antenna: 2x UFL (ANT1, ANT2) Data: 80 Pin SMT  Motherboard/ENC Antenna (Enclosed): RP-SMA Female Data: RJ-45 x2 (Ethernet) Female DB9 (Serial) USB Type A Micro-AB USB (Console) 4 PIN Interlock (Vin, I/O)			
Environmental		-40°F to 185°F (-40°C to +85°C) 5-95% humidity, non-condensing			
Weight		OEM Approx. 5 grams Motherboard Approx. 50 grams Enclosed Approx. 165 grams			
Dimensions		OEM Approx. 1.05" x 1.3" x .15" (27mm x 33mm x 4mm) Motherboard Approx. 2.5" x 3.0" x 0.70" (64mm x 76mm x 18mm) Enclosed Approx. 3.05" x 2.2" x 1.1" (77mm x 55mm x 28mm)			
Approvals		FCC Part 15.247 IC RSS210			

Performance Specifications				
Rate	Mode	Tx Power	Recieve	
1 Mbps	802.11b	30 dBm	-97 dBm ±1 dB	
2 Mbps	802.11b	30 dBm	-96 dBm ±1 dB	
5.5 Mbps	802.11b	30 dBm	-95 dBm ±1 dB	
	802.11b	30 dBm	-92 dBm ±1 dB	
6 Mbps	802.11g	30 dBm	-94 dBm ±1 dB	
9 Mbps	802.11g	30 dBm	-93 dBm ±1 dB	
12 Mbps	802.11g	30 dBm	-91 dBm ±1 dB	
18 Mbps	802.11g	30 dBm	-90 dBm ±1 dB	
24 Mbps	802.11g	28 dBm	-86 dBm ±1 dB	
36 Mbps	802.11g	28 dBm	-83 dBm ±1 dB	
48 Mbps	802.11g	26 dBm	-77 dBm ±1 dB	
54 Mbps	802.11g	26 dBm	-75 dBm ±1 dB	
MCS0	802.11n (HT20)	30 dBm	-96 dBm ±1 dB	
	802.11n (HT20)	30 dBm	-95 dBm ±1 dB	
	802.11n (HT20)	30 dBm	-92 dBm ±1 dB	
	802.11n (HT20)	28 dBm	-90 dBm ±1 dB	
	802.11n (HT20)	28 dBm	-86 dBm ±1 dB	
	802.11n (HT20)	26 dBm	-83 dBm ±1 dB	
	802.11n (HT20)	26 dBm	-77 dBm ±1 dB	
MCS1	802.11n (HT40)	30 dBm	-94 dBm ±1 dB	
	802.11n (HT40)	30 dBm	-93 dBm ±1 dB	
	802.11n (HT40)	30 dBm	-90 dBm ±1 dB	
	802.11n (HT40)	28 dBm	-89 dBm ±1 dB	
	802.11n (HT40)	28 dBm	-84 dBm ±1 dB	
	802.11n (HT40)	26 dBm	-81 dBm ±1 dB	
	802.11n (HT40)	26 dBm	-75 dBm ±1 dB	
MCS7	802.11n (HT40)	26 dBm	-73 dBm ±1 dB	

Order Options	
<b>MHS185200</b>	pX2 OEM 1W 802.11b/g/n WIFI Router
<b>MHK185230</b>	pX2 Enclosed 1W 802.11b/g/n WIFI Router

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