DYMEC pX2

DYMEC AMERICAN INDUSTRIAL

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*

Weighs 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



Pico Motherboard



pX2 Enclosed

◆ 802.11 ◆ Dual Ethernet ◆ Firewall ◆ Serial ◆ USB 2.0

Rev 1.2

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, CCQ), Link Test
Rejection	Excellent strong signal interference & rejection characteristics
Input Voltage	
OEM	Vcc: 3.3VDC (+/-0.3V) / Vpa: 3.3 to 5.0 VDC
Motherboard/ENC	7-30 VDC
Connectors:	
OEM	Antenna: UFL (Main) 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
11 Mbps	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
MCS1	802.11n (HT20)	30 dBm	-95 dBm ±1 dB
MCS2	802.11n (HT20)	30 dBm	-92 dBm ±1 dB
MCS3	802.11n (HT20)	28 dBm	-90 dBm ±1 dB
MCS4	802.11n (HT20)	28 dBm	-86 dBm ±1 dB
MCS5	802.11n (HT20)	26 dBm	-83 dBm ±1 dB
MCS6	802.11n (HT20)	26 dBm	-77 dBm ±1 dB
MCS7	802.11n (HT20)	26 dBm	-75 dBm ±1 dB
MCS0	802.11n (HT40)	30 dBm	-94 dBm ±1 dB
MCS1	802.11n (HT40)	30 dBm	-93 dBm ±1 dB
MCS2	802.11n (HT40)	30 dBm	-90 dBm ±1 dB
MCS3	802.11n (HT40)	28 dBm	-89 dBm ±1 dB
MCS4	802.11n (HT40)	28 dBm	-84 dBm ±1 dB
MCS5	802.11n (HT40)	26 dBm	-81 dBm ±1 dB
MCS6	802.11n (HT40)	26 dBm	-75 dBm ±1 dB
MCS7	802.11n (HT40)	26 dBm	-73 dBm ±1 dB

Order Options

KY-MHK185230- KIT	pX2 Enclosed 1W 802.11b/g/n WIFI Router Kit (includes antenna & power supply)

Contact Information

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DYMEC Inc.
1107 SE Willow Pl,
Blue Springs, MO 64014

Email: sales@DYMEC.com
Telephone:(816) 988-7861
Fax: (480) 287-8605