

Miniature 2.4 GHz Wireless Modem

For the ultimate solution in design flexibility and cost/size sensitive applications, consider the Pico Series P2400 radio platform. Operating in the 2.4 GHz ISM band, the P2400 provides an international, economical solution with the design flexibility, features, and performance never seen before!

Weights only 5 grams!



1.3" X 1.05" X 0.13"

Low Cost

2.4 GHz ISM

30 dBm (1W)

Extended Temperature

Dual Serial Ports

Excellent Sensitivity

Features

- Supports 19.2 kbps to 345 kbps
- Superheterodyne Architecture
- Quad Filter Stage provides Extreme Noise & Interference Rejection
- Rejection > 65 dBc
- Point-to-Point, Point-to-Multipoint, Store & Forward Repeater
- Industrial Temperature (-55°C to +85°C)
- Maximum allowable transit power (Adjustable)
- Low Power consumption in Sleep and Sniff modes (Future)
- 32 bits of CRC, selectable Forward Error Correction with retransmission
- Separate diagnostics port—transparent remote diagnosis and online network control
- Extremely Small Footprint (26.5 x 33 x 3.5mm | 1.3 x 1.05 x 0.15")
- Microhard compatibility with n2420BF



Enclosed Option



P2400-SWP

Specifications



Frequency	2.400 to 2.4835 GHz
Spreading Method	Frequency Hopping, DTS
Forward Error Correction	Hamming, BCH, Golay, Reed-Solomon, Viterbi
Error Detection	32 bits of CRC, ARQ
Encryption	Optional (see -AES option)
Range	30 miles (50 km)
Serial Interface	3.3V CMOS RS232/485 (Selectable)
Serial Baud Rate	300 bps to 230 kbps
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer
Signals Interface	RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode, 4 Digital Inputs/Outputs, 1 Analog Input, 1 Analog Output
Remote Diagnostics	Battery Voltage, Temperature, RSSI, Packet Statistics
Rejection	Adjacent Channel @ 2400 MHz: 57 dB Alternate Channel @ 2400 MHz: 65 dB
Core Voltage	OEM Enclosed SWP 3.3VDC is required for 1W 3.6VDC is required for 2W 8-30 VDC 8-30 VDC
Power Consumption (3.3V)	Sleep: < 1mA (Future) Idle: 20mA Rx: 45mA to 98mA Tx Peak: 2A
Connectors:	OEM Enclosed SWP Antenna UFL Data 80 Pin SMT Antenna RP-SMA Female Bulkhead Data DB-9F Antenna MMCX Power, Data 10-Pin (GHR-10V-S)
Environmental	-55°C - +85°C 5-95% humidity, non-condensing
Weight	OEM Enclosed SWP ~ 5 grams ~ 120 grams ~ 37 grams
Dimensions	OEM Enclosed SWP ~ 26.5 x 33 x 3.5 mm ~ 46 x 66 x 25 mm ~ 36 x 48 x 15 mm
Approvals	FCC ISED (Industry Canada) CE Japan MIC South Korea KC RoHS Compliant

Performance Specifications				
Rate (kbps)	Power	Sensitivity (dBm)	Bandwidth (KHz)	Regulatory
19.2	1W	-116	25	FCC / IC
56	1W	-113	60	FCC / IC
115.2	1W	-109	150	FCC / IC
172.8	1W	-108	180	FCC / IC
230.4	1W	-106	230	FCC / IC
276.4	1W	-105	280	FCC / IC
345	1W	-103	400	FCC / IC
19.2	100mW	-115	25	FCC/IC/CE
56	100mW	-110	60	FCC/IC/CE
115.2	100mW	-109	150	FCC/IC/CE
172.8	100mW	-108	180	FCC/IC/CE
230.4	100mW	-106	230	FCC/IC/CE
276.4	100mW	-105	280	FCC/IC/CE
345	100mW	-103	400	FCC/IC/CE
Order Options				
P2400		Base Model .		
-AES		128-bit AES Encryption.**		
-ENC		Enclosed Model		
-SWP		SWP Series		
		**AES encryption requires an Export Permit		



Microhard Systems Inc.
150 Country Hills Landing N.W.
Calgary, AB, Canada T3K 5P3

www.microhardcorp.com
info@microhardcorp.com
 1-855-353-0028