

## 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!

*Low Cost*

*2.4 GHz ISM*

*1W RF Power*

*Extended Temperature*

*Dual Serial Ports*

*Enhanced Sensitivity*

*Excellent Rejection*

**Weights only 5 grams!**



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

## P2400 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



# Pico Series

# Specifications

Frequency		Performance Specifications				
Spreading Method	Frequency Hopping, DTS	Rate (kbps)	Power	Sensitivity (dBm)	Bandwidth (KHz)	Regulatory
Forward Error Correction	Hamming, BCH, Golay, Reed-Solomon, Viterbi	19.2	1W	-116	25	FCC / IC
Error Detection	32 bits of CRC, ARQ	56	1W	-113	60	FCC / IC
Encryption	Optional (see -AES option)	115.2	1W	-109	150	FCC / IC
Range	30 miles (50 km)	172.8	1W	-108	180	FCC / IC
Serial Interface	3.3V CMOS RS232/485 (Selectable)	230.4	1W	-106	230	FCC / IC
Serial Baud Rate	300 bps to 230 kbps	276.4	1W	-105	280	FCC / IC
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer	345	1W	-103	400	FCC / IC
Signals Interface	RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode, 4 Digital Inputs/Outputs, 1 Analog Input, 1 Analog Output	19.2	100mW	-115	25	FCC/IC/CE
Remote Diagnostics	Battery Voltage, Temperature, RSSI, Packet Statistics	56	100mW	-110	60	FCC/IC/CE
Rejection	Adjacent Channel @ 2400 MHz: 57 dB Alternate Channel @ 2400 MHz: 65 dB	115.2	100mW	-109	150	FCC/IC/CE
Core Voltage	<b>OEM</b> 3.3VDC is required for 1W <b>Enclosed</b> 3.6VDC is required for 2W 9-30 VDC	172.8	100mW	-108	180	FCC/IC/CE
		230.4	100mW	-106	230	FCC/IC/CE
Power Consumption (3.3V)	Sleep: < 1mA (Future) Idle: 20mA Rx: 45mA to 98mA Tx Peak: 2A	276.4	100mW	-105	280	FCC/IC/CE
		345	100mW	-103	400	FCC/IC/CE
Connectors:	<b>OEM</b> Antenna: UFL Data: 80 Pin SMT <b>Enclosed</b> Antenna: RP-SMA Female Bulkhead Data: DB9-F	Order Options				
Environmental	-55°C - +85°C 5-95% humidity, non-condensing	<b>P2400</b>	Base Model .			
Weight	<b>OEM</b> Approx. 5 grams <b>Enclosed</b> Approx. 120 grams	<b>-AES</b>	128-bit AES Encryption.**			
Dimensions	<b>OEM</b> Approx. 1.05" x 1.3" x .13" (26.5mm x 33mm x 3.5mm) <b>Enclosed</b> Approx. 1.80" x 2.60" x 1.0" (46mm x 66mm x 25mm)	<b>-ENC</b>	Enclosed Model			
Approvals	FCC IC RoHS Compliant	**AES encryption requires an Export Permit				

## Contact Information

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