

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 | OEM 3.3VDC is required for 1W Enclosed 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: | OEM Antenna: UFL Data: 80 Pin SMT Enclosed Antenna: RP-SMA Female Bulkhead Data: DB9-F | Order Options | | | | |
| Environmental | -55°C - +85°C 5-95% humidity, non-condensing | P2400 | Base Model . | | | |
| Weight | OEM Approx. 5 grams Enclosed Approx. 120 grams | -AES | 128-bit AES Encryption.** | | | |
| Dimensions | OEM Approx. 1.05" x 1.3" x .13" (26.5mm x 33mm x 3.5mm) Enclosed Approx. 1.80" x 2.60" x 1.0" (46mm x 66mm x 25mm) | -ENC | Enclosed Model | | | |
| Approvals | FCC ISED (Industry Canada) CE Japan MIC South Korea KC RoHS Compliant | **AES encryption requires an Export Permit | | | | |

Contact Information

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