

## Miniature 840 to 845 MHz Wireless Modem

For the ultimate solution in design flexibility and cost/size sensitive applications, consider the Pico Series P840 radio platform. Offering robust and secure operation in the 840-845 MHz Band, the P840 provides an economical solution with the design flexibility, features, and performance never seen before!

840 - 845 MHz

1W Frequency Hopping

2W Fixed Channel

Extended Temperature

Dual Serial Ports

Excellent Sensitivity

Weights only 5 grams!



1.3" X 1.05" X 0.13"

## Features

- Supports up to 345 kbps
- Software Selectable Frequency Hopping or Fixed Channel Operation
- Quad Filter Stage provides Extreme Noise & Interference Rejection
- 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")

## Enclosed Option



# Pico Series

# Specifications

<b>Spreading Method / Modulation Scheme</b>	Frequency Hopping/Fixed Frequency, GMSK, 2GFSK, 4GFSK, QPSK	<b>Frequency 840 to 845 MHz (Frequency Hopping)</b>			
<b>Forward Error Correction</b>	Hamming, BCH, Golay, Reed-Solomon, Viterbi	<b>Rate (kbps)</b>	<b>Power (W)</b>	<b>Sensitivity (dBm)</b>	<b>Bandwidth (kHz)</b>
<b>Error Detection</b>	32 bits of CRC, ARQ	19.2	1	-116	25
<b>Encryption</b>	Optional (see –AES option)	56	1	-113	60
<b>Range</b>	Up to 60 miles (100 km)	115.2	1	-109	150
<b>Serial Interface</b>	3.3V CMOS RS232/485 (Selectable)	172.8	1	-108	180
<b>Serial Baud Rate</b>	300 bps to 230 kbps	230.4	1	-106	230
<b>Operating Modes</b>	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer	276.4	1	-105	280
<b>Signals Interface</b>	RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode, 4 Digital Inputs/Outputs, 1 Analog Input, 1 Analog Output	345	1	-103	400
<b>Remote Diagnostics</b>	Battery Voltage, Temperature, RSSI, Packet Statistics	<b>Frequency 840 to 845 MHz (Single Channel)</b>			
<b>Rejection</b>	Adjacent Channel @ 840 MHz: 57 dB Alternate Channel @ 840 MHz: 65 dB	19.2	2	-116	25
<b>Core Voltage</b>	<b>OEM Enclosed</b> 3.3VDC 9-30 VDC	56	2	-113	60
<b>Power Consumption (3.3V)</b>	Sleep: < 1mA (Future) Idle: 20mA Rx: 45mA to 98mA Tx Peak: 2A	115.2	2	-109	150
<b>Connectors:</b>	<b>OEM Enclosed</b> Antenna: UFL Data: 80 Pin SMT Antenna: RP-SMA Female Bulkhead Data: DB9-F	172.8	2	-108	180
<b>Environmental</b>	-55°C - +85°C 5-95% humidity, non-condensing	230.4	2	-106	230
<b>Weight</b>	<b>OEM Enclosed</b> Approx. 5 grams Approx. 120 grams	276.4	2	-105	280
<b>Dimensions</b>	<b>OEM Enclosed</b> Approx. 1.05" x 1.3" x .13" (26.5mm x 33mm x 3.5mm) Approx. 1.80" x 2.60" x 1.0" (46mm x 66mm x 25mm)	345	2	-103	400
<b>Approvals</b>	RoHS Compliant	<b>Order Options</b>			
		<b>P840</b>	840 - 845 MHz Pico OEM Wireless Modem		
		<b>-AES</b>	128-bit AES Encryption. Required Export Permit.		
		<b>-ENC</b>	Enclosed Model		

## Contact Information

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