

Miniature Mesh 1W 900 MHz Wireless Modem

For the ultimate solution for cost and size sensitive applications, consider the P900 with its extremely small footprint and design flexibility. The P900 offers a low cost solution with the reliability, features, and performance of our larger modems!

Very Low Cost

Mesh

1 Watt

Extended Temperature

Dual Serial Ports

Excellent Sensitivity

Weighs only 5 grams!



1.3" X 1.05" X 0.13"

The P900 features robust, high speed, low latency, secure data communications. The P900 has full serial and diagnostics data capabilities for legacy devices! The P900 offers excellent noise figure, superior interference rejection, agile frequency synthesis, digital modulation, and matched filter detection.

Features of the P900

- Very Low Cost
- Supports up to 276kbps!
- Quad Filter Stage provides Extreme Noise & Interference Rejection
- True Self Healing Mesh, Auto Routing, Store & Forward
- Industrial Temperature (-55°C to +85°C)
- Maximum allowable transit power (Adjustable, up to 1W)
- Low Power consumption in Sleep and Sniff modes
- 32 bits of CRC, selectable Forward Error Correction with retransmit
- 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



P900

Specifications

Frequency	902-928 MHz	Power Consumption (3.3V +/- 0.3V @1W)	Sleep	< 1mA
Spreading Method	Frequency Hopping		Idle	3.5mA
Forward Error Detection	Hamming BCH Golay Reed-Solomon	Connectors:	Rx:	45mA to 98mA
Error Detection	32 bits of CRC, ARQ		OEM Antenna Data Enclosed Antenna Data	Tx :
Encryption	Optional (see -AES option)	Environmental		
Range	40 miles (60 km)	Weight	OEM	Approx. 5 grams
Sensitivity (@10⁻⁴)	-114 dBm @ 57.6 kbps -112 dBm @ 115.2 kbps -109 dBm @ 172.8 kbps -107 dBm @ 230.4 kbps		Enclosed	Approx. 120 grams
Output Power	100mW - 1W (20-30dBm)	Dimensions	OEM	Approx. 1.05" x 1.3" x .13" (26.5mm x 33mm x 3.5mm)
Serial Interface	3.3V CMOS RS232/485 (Selectable)		Enclosed	Approx. 1.80" x 2.60" x 1.0" (46mm x 66mm x 25mm)
Serial Baud Rate	Up to 230.4 kbps asynchronous	Approvals		FCC Part 15.247 IC RSS210 Anatel RoHS Compliant
Link Rate	57.6 to 276 kbps	Order Options		
Operating Modes	Mesh, Auto Routing, Store and Forward, Self Healing, Packet Routing Modes	-AES		128-bit AES Encryption (requires permit for export outside of Canada and USA.)
Signals Interface	RxD1, TxD1, RTS, CTS DCD, DSR, DTR, RxD2, TxD2, RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode, 4 Digital Inputs/Outputs, 1 Analog Input, 1 Analog Output	-AES256		256-bit AES Encryption (requires permit for export outside of Canada and USA.)
Blocking	+/- 1 MHz > 55 dBc +/- 2.5 MHz > 60 dBc +/- 5 MHz > 65 dBc > 930 MHz > 70 dBc < 890 MHz > 70 dBc	-ENC		Enclosed Model
Remote Diagnostics	Battery Voltage, Temperature, RSSI, Packet Statistics			
Core Voltage	OEM: 3.3VDC Nominal (+/- 0.3V) Enclosed: 9-30 VDC			

Contact Information

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