

## Miniature High Power 900 MHz Wireless Modem

The all new hp900, which is 1/2 the size of our standard Pico Series Radio, delivers the ultimate solution for cost and size sensitive applications. The hp900 offers a 900 MHz ISM Band, low cost, serial radio with the reliability, features, and performance of our larger modems!

*High Power*

*Very Low Cost*

*PMP | PTP*

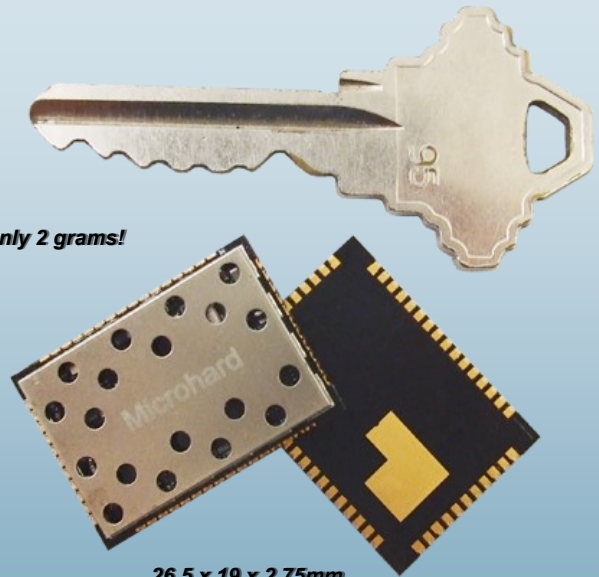
*Extended Temperature*

*Only 2 grams!*

*Excellent Sensitivity*

*-122 dBm @ 19.2 kbps*

**Weighs only 2 grams!**



**26.5 x 19 x 2.75mm**

### Features of the hp900

- Very Low Cost
- Link Rates from 19.2 kbps to 500 kbps!
- Multi Stage, SAW Filters provide Extreme Noise and Interference Rejection
- Point-to-Multipoint & Point-to-Point Network Topology
- Master & Remote Operating Modes
- Industrial Temperature (-55°C to +85°C)
- Maximum allowable Tx power (up to 1W)
- Low Power consumption in Sleep and Sniff modes
- 32 bits of CRC, selectable Forward Error Correction with retransmit
- Extremely Small Footprint (26.5 x 19 x 2.75mm | 1.05 x .75 x .11")



# hp900

# Specifications

		Current Consumption							
		Tx Power (dBm)	Vcc (Voc)	VRF (mA)	Vdd (mA)				
Frequency	902-928 MHz								
Spreading Method	Frequency Hopping								
Forward Error Detection	Hamming	21	3.6	520	30				
	BCH	25	3.6	720	33				
	Golay	28	3.6	990	36				
	Reed-Solomon	30	3.6	1290	38				
Error Detection	32 bits of CRC, ARQ	33	3.6	1800	54				
Encryption	Optional (see -AES option)	Rx	3.6	0	47				
Range	40 miles (60 km)	Rx (link)	3.6	0	47-56				
Sensitivity (@10 <sup>-4</sup> )	-122 dBm @ 19.2 kbps	<b>Order Options</b>							
	-119 dBm @ 38.4 kbps								
	-115 dBm @ 115.2 kbps								
	-112 dBm @ 172.8 kbps								
	-111 dBm @ 230.4 kbps								
	-109 dBm @ 345.6 kbps								
	-108 dBm @ 500 kbps								
Output Power	Up to 1W Frequency Hopping	<b>hp900</b> 900 MHz Miniature OEM Wireless Modem							
Serial Interface	3.6V CMOS					<b>-AES</b> 128-bit AES Encryption. Requires Export Permit.			
Serial Baud Rate	Up to 230.4 kbps asynchronous								
Link Rate	19.2 to 500 kbps								
Operating Modes	Master, Remote								
Signals Interface	RxD, TxD, RTS, CTS, DCD, DSR, DTR, RSSI, Tx/Rx, Reset, Config								
Blocking	+/- 1 MHz > 55 dBc								
	+/- 2.5 MHz > 60 dBc								
	+/- 5 MHz > 65 dBc								
	> 930 MHz > 70 dBc								
	< 890 MHz > 70 dBc								
Remote Diagnostics	Battery Voltage, Temperature, RSSI, Packet Statistics								
Core Voltage	3.3 - 3.6VDC								
Connectors:	54 Pin SMT								
Environmental	-55°C - +85°C								
Weight	Approx. 2 grams								
Dimensions	Approx. 1.05" x 0.75" x .11" (26.5mm x 19mm x 2.75mm)								
Approvals	FCC Pending IC Pending								

## Contact Information

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