

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

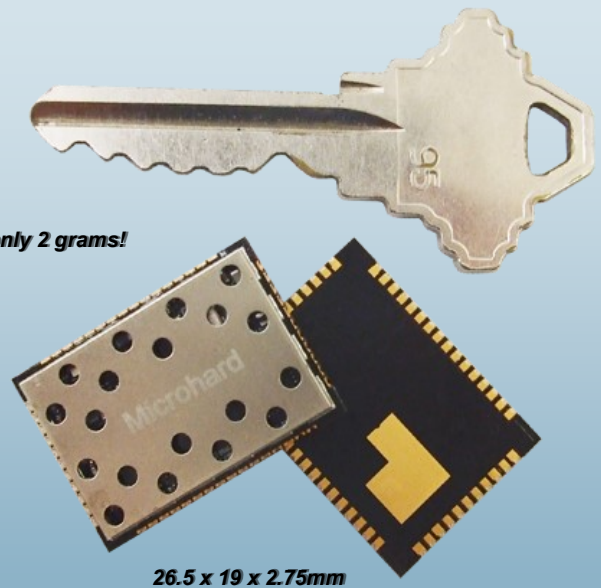
Extended Temperature

Only 2 grams!

Excellent Sensitivity

-122 dBm @ 19.2 kbps

Weights 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 Motherboard

hp900 Test Jig

hp900

Specifications

Frequency	902-928 MHz	Current Consumption			
Spreading Method	Frequency Hopping	Tx Power (dBm)	Vcc (Voc)	VRF (mA)	Vdd (mA)
Forward Error Detection	Hamming BCH Golay Reed-Solomon	21	3.6	520	30
Error Detection	32 bits of CRC, ARQ	25	3.6	720	33
Encryption	Optional (see -AES option)	28	3.6	990	36
Range	40 miles (60 km)	30	3.6	1290	38
Sensitivity (@10⁻⁴)	-122 dBm @ 19.2 kbps -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	33	3.6	1800	54
Output Power	Up to 1W Frequency Hopping	Rx	3.6	0	47
Serial Interface	3.6V CMOS	Rx (link)	3.6	0	47-56
Serial Baud Rate	Up to 230.4 kbps asynchronous	Order Options			
Link Rate	19.2 to 500 kbps	hp900	900 MHz Miniature OEM Wireless Modem		
Operating Modes	Master, Remote	-AES	128-bit AES Encryption. Requires Export Permit.		
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 IC				

Contact Information

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Microhard Systems Inc.
150 Country Hills Landing N.W.
Calgary, AB, Canada T3K 5P3

Email: info@microhardcorp.com
Tel: (403) 248-0028
Fax: (403) 248-2762



www.microhardcorp.com