

Miniature High Power Enclosed 900 MHz Wireless Modem

The all new HP900-SWP, is a miniature, ready to deploy version of our Half Pico Series Radio. The HP900 is a compact and robust, 902 - 928 MHz ISM Band modem, designed with all of the reliability, security, and performance of our larger modems. The HP900-SWP delivers the ultimate solution for cost and size sensitive applications!

Weighs only 32 grams!



40.5 x 30.0 x 14.5mm

High Power (up to 4W)

Low Cost

PMP | PTP

Extended Temperature

Only 32 grams!

Excellent Sensitivity

-122 dBm @ 19.2 kbps

Features

- 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)
- Adjustable Tx power (up to 36dBm / 4W)
- Frequency Hopping or Fixed Frequency Operation
- Low Power consumption in Sleep and Sniff modes
- 32 bits of CRC, selectable Forward Error Correction with retransmit
- Miniature Size (40.5 x 30.0 x 14.5mm | 1.6 x 1.185 x 0.56")



HP900-SWP Specifications



Frequency	902-928 MHz
Spreading Method	Frequency Hopping or Fixed Frequency
Forward Error Detection	Hamming BCH Golay Reed-Solomon
Error Detection	32 bits of CRC, ARQ
Encryption	128-bit AES. Optional - Requires Export Permit (See order options)
Range	50+ miles (80+ km)
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
Output Power	HP900 1W Frequency Hopping HP900-PRO 1W FHSS, 4W Fixed Frequency HP900-MAX 4W FHSS, 4W Fixed Frequency
Serial Interface	RS232
Serial Baud Rate	Up to 230.4 kbps
Link Rate	19.2 to 500 kbps (FCC/IC version limited to 400 kbps)
Operating Modes	Master, Remote
Mating Connector	8-Pin (GHR-08V-S)
Signals Interface	VIN, GND, TXD, RXD, CTS, ON/OFF, CFG
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
Input Voltage	7-30V _{DC}
Environmental	-55°C to +85°C
Weight	~32 grams
Dimensions	~1.60" x 1.185" x 0.56" (40.5mm x 30mm x 14.5mm)
Approvals	FCC ISED (Industry Canada)

HP900-SWP Current Consumption		
Tx Power (dBm)	VIN (V _{DC})	Current (mA)
30	12	400
33	12	650
36	12	1200
Rx Mode	12	20

Order Options	
HP900	900 MHz, 1W FHSS, FCC/ISED
-PRO	1W FHSS, 4W Fixed, Higher Data Rates
-MAX	4W FHSS, 4W Fixed, AES128, Higher Data Rates. Requires Export Permit.
-SWP	Enclosed Model
-AES	128-bit AES Encryption. Requires Export Permit.

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