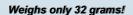
HP900-SWP



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!







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 HP900-PRO HP900-MAX	1W 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	

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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