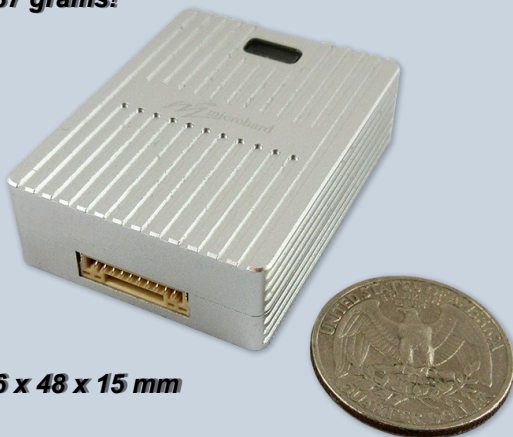


Low Size, Weight & Power Enclosed 900/400 MHz Wireless Modem

For the ultimate solution in design flexibility and cost/size sensitive applications, consider the Pico Series P400-SWP radio platform. Offering software selectable ISM 900 MHz & Licensed 400MHz modes, in a single module, the P400-SWP provides an economical solution with the design flexibility, features, and performance never seen before!

Only 37 grams!



36 x 48 x 15 mm

400 MHz Licensed

900 MHz ISM

Up to 2 Watts

Extended Temperature

Dual Serial Ports

Excellent Sensitivity

Features

- Supports up to 345 kbps (@ 900MHz)
- Software Selectable 400 MHz & 900 MHz Bands.
- Quad Filter Stage provides Extreme Noise & Interference Rejection
- Point-to-Point, Point-to-Multipoint, Store & Forward Repeater
- Industrial Temperature (-55°C to +85°C)
- Maximum allowable transit power (Adjustable)
- 32 bits of CRC, selectable Forward Error Correction with retransmission
- Separate diagnostics port—transparent remote diagnosis and online network control
- Miniature Size (36 x 48 x 15 mm)
- Compatible with some GPS Radio Transceivers



SWP Serial Expander Board & Interface Cable

P400-SWP Specifications



Spreading Method / Modulation Scheme	Frequency Hopping, GMSK, 2GFSK, 4GFSK, QPSK
Forward Error Correction	Hamming, BCH, Golay, Reed-Solomon, Viterbi
Error Detection	32 bits of CRC, ARQ
Encryption	Optional (see -AES option)
Range	60 miles (100 km)
Serial Interface	RS232/485 (Selectable)
Serial Baud Rate	300 bps to 230 kbps
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, Peer-to-Peer
Remote Diagnostics	Battery Voltage, Temperature, RSSI, Packet Statistics
Rejection	Adjacent Channel @ 400 MHz: 60 dB Alternate Channel @ 400 MHz: 70 dB Adjacent Channel @ 900 MHz: 57 dB Alternate Channel @ 900 MHz: 65 dB
Input Voltage	7 - 30VDC
Mating Connector	Power, Data: 10-Pin (GHR-10V-S) Antenna: MMCX
Environmental	-55°C to +85°C 5-95% humidity, non-condensing
Weight	~37 grams
Dimensions	~36 x 48 x 15 mm
Approvals	FCC Part 15.247 IC RSS210 FCC Part 15.90 IC RSS119 RoHS Compliant

Frequency 410 to 480 MHz (Licensed Band)				
Rate (kbps)	Power	Sensitivity (dBm)	Bandwidth (kHz)	Regulatory
3.6	2W	-118	6.25	FCC / IC
4.8	2W	-117	12.5	FCC / IC
9.6	2W	-115	12.5	FCC / IC
19.2	2W	-114	25	IC
Frequency 410 to 480 MHz (Frequency Hopping)				
56	2W**	-113	60	None*
115.2	2W**	-109	150	None*
172.8	2W**	-108	180	None*
230.4	2W**	-106	230	None*
276.4	2W**	-105	230	None*
345	2W**	-103	400	None*
Frequency 902 to 928 MHz (Frequency Hopping)				
19.2	1W	-116	25	FCC / IC
56	1W	-113	60	FCC / IC
115.2	1W	-109	150	FCC / IC
172.8	1W	-108	180	FCC / IC
230.4	1W	-106	230	FCC / IC
276.4	1W	-105	230	FCC / IC
345	1W	-103	400	FCC / IC
19.2	2W**	-115	25	None*
56	2W**	-110	60	None*
115.2	2W**	-109	150	None*
172.8	2W**	-108	180	None*
230.4	2W**	-106	230	None*
276.4	2W**	-105	230	None*
345	2W**	-103	400	None*
Order Options				
P400-SWP	Base Model (1W 900MHz & 2W 400MHz Licensed Operation).*			
-AES	128-bit AES Encryption.**			
-C2S	2W 900MHz, 2W 400MHz Frequency Hopping, 2W 400MHz Licensed & 128-bit AES.**			
-C1S	1W 900MHz, 1W 400MHz Frequency Hopping, 2W 400MHz Licensed & 128-bit AES.**			
*Standard Modems are Shipped with 400MHz Licensed band operation up to 2W and 900MHz ISM FHSS operation 1W with no AES encryption. No other operation is allowed.				
Operating outside this requires compliance with applicable Radio Regulatory Bodies and Canadian Export Laws. Extra Cost/Activation/Proof of Regulatory Compliance is Required.				
**AES encryption, 2W frequency hopping operation requires Export Permit				



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