

## HyperLink Wireless brand 900 MHz Full Band Ultra High Q 4-Pole Indoor and Outdoor Bandpass Filters

### Features

- Ultra-High Quality Microwave Cavity Filter
- Ultra Low Insertion Loss (0.5 dB nominal)
- Reduce Interference and Improve Performance
- Industrial Grade
- Rugged Aluminum Construction
- Indoor and Outdoor Models
- Provides Lightning Protection (DC Short)
- Ideal for 902-928 MHz ISM band applications
- Compact Size
- N-Female Connectors
- Optional Mast Mounting Kit Available for Outdoor Model



**Outdoor Model: BPF900A**



**Indoor Model: BPF900**

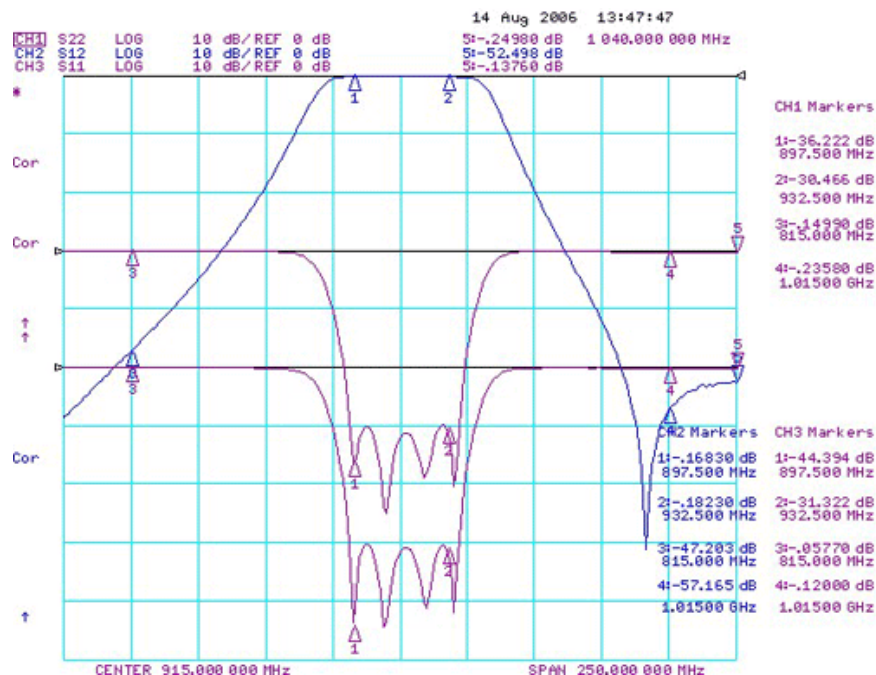
### Description

The HyperLink 900 MHz 4-Pole Ultra-High Q full band filter is designed for full band applications. By reducing interference outside the 915 MHz band such as from cellular and paging signals, improved performance in noisy environments can be achieved. The BPF900 series filters are ideal for use with 902-928 MHz ISM band applications, 900 MHz RFID applications as well as 900 MHz Zigbee applications. Both these filters feature rugged aluminum construction. The BPF900 is designed for indoor use. For outdoor use choose the BPF900A.

### Specifications

Models:	BPF900 (Indoor)	BPF900A (Outdoor)
Center Frequencies	915 MHz	
Out of Band Rejection	> 40 dB @ 815 MHz > 40 dB @ 1015 MHz	
Bandwidth	35 MHz	
Insertion Loss	0.5 dB nominal	
Passband Ripple	< 0.25 dB	
Return Loss	> 15 dB	
Impedance	50 Ohm	
Power Handling	50 Watts	
Connectors	(2) N-Female	
Number of Cavities	4	
Operating Temperature	-40° F to 185° F (-40° C to +85° C)	
Dimensions	2.2" x 2.2" x 1.5" (56 x 56 x 40 mm)	2.9" x 2.9" x 1.9" (74 x 74 x 50 mm)

## Insertion Loss / Return Loss Plots



## Optional Mast Mounting Kit



**Model HGX-PMT14:** Mast Mounting Kit for HyperLink outdoor filters. For mounting to 1-1/4" (31.7mm) to 2" (51mm) dia. masts. This kit contains an aluminum mounting bracket, zinc plated steel 1/4-20 x 2" u-bolt with serrated flange nuts and filter mounting hardware.

## Bandpass Filter Q & A

**Question: Why do I need a Hyperlink Ultra High Q band pass filter?**

**Answers:**

- To reduce interference thus improving radio reception.
- To increase performance of co-located equipment.

**Question: What is interference and why do I want to eliminate it?**

**Answers:**

- Interference is caused by transmission sources near the band you are transmitting on. It can be identified by signal strength and frequency.
- Unwanted transmissions, interference, may confuse your receiver or cover up the signal you are trying to receive.

**Question: How do the Hyperlink Ultra High Q band pass filters work?**

**Answers:**

- The filter will only pass the frequency range you are transmitting or receiving and reduce the interference of signals outside your band.
- The filter will NOT reduce interference within your frequency band caused by other signals or users within the same band.

**Question: What is meant by frequency band filtering?**

**Answers:**

- The passing of frequency band while rejecting all other frequency bands.
- The protection against signals outside your band such as cellular.