

RF Filters / Splitters



RF Filters / Splitters Tutorial

What are RF Filters?

RF Filters reduce out of band interference and improve performance of co-located equipment. An RF Filter will only pass the frequency and channel you are transmitting or receiving and reduce the interference of signals outside your channel. Interference is usually caused by transmission sources near the channel you are transmitting on.

L-com's RF Filters are available in full band versions or fixed channel versions, and provide excellent channel rejection. All filters feature rugged aluminum construction and are available for indoor or outdoor applications.

What are RF Splitters/Combiners?

An RF Splitter/Combiner is a transmission component which divides or sums power between two or more ports. Typically they are used for connecting more than one antenna to a single radio and can also be used to connect multiple radios to a single antenna using the same frequency.

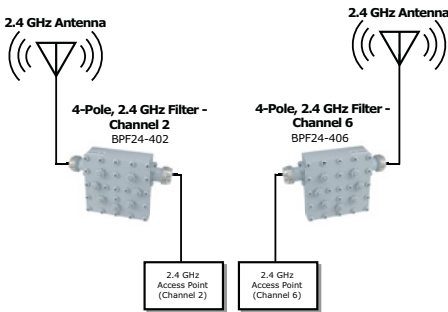
What are RF Diplexers?

An RF Diplexer is a device that combines two signals onto a single transmission line. In general the two signals operate at different frequencies. L-com's Diplexers are designed to split 2.4 GHz and 5 GHz from a single radio feed to separate 2.4 GHz and 5 GHz antennas. Many dual-band 802.11a/b/g radios share a single antenna. These devices split these signals so that two separate 2.4 GHz and 5 GHz antennas can be used to improve performance. In addition, L-com Diplexers can also be used to combine 2.4 GHz or 5 GHz signals onto a single cable.



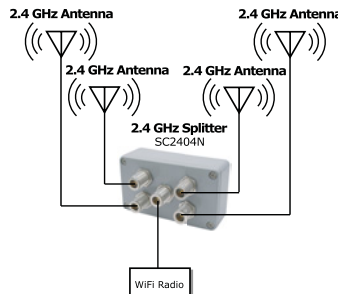
For more useful information go to...
www.L-com.com/Resources

Typical RF Filter Application



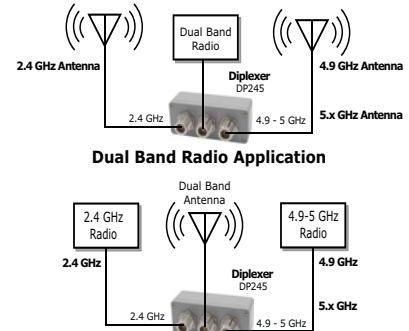
2.4 GHz Bandpass Channel Filter Application

Typical RF Splitter Application

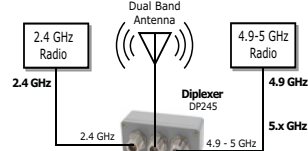


4-Way Signal Splitter Application

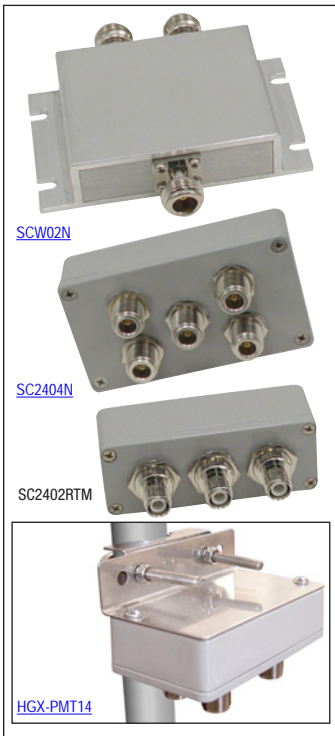
Typical RF Diplexer Applications



Dual Band Radio Application



Dual Band Antenna Application



Item #	Description	1-9	10-24	25-99	100-249	250-499
HyperGain® 800 MHz, 900 MHz, 2.4 GHz, 3.5 GHz and 5.8 GHz Signal Splitters/Signal Combiners						
L-com's HyperLink brand signal splitters/signal combiners are used for connecting more than one antenna to a single radio. They feature weatherproof construction and can be installed indoors or outdoors. These flexible splitters can be used with amplified systems since they will pass DC power to all ports. HyperGain® WLAN signal splitters/signal combiners are available in 2-way, 3-way and 4-way models and are available with N-Female and RP-TNC jack connectors.						
✓RoHS 800-2600 MHz Broadband Signal Splitters						
SCW02N	2-Way, NF Connectors	39.99	35.99	31.99	27.99	23.99
SCW03N	3-Way, NF Connectors	59.99	53.99	47.99	41.99	35.99
✓RoHS 900 MHz Signal Splitters						
SC902N	2-Way, NF Connectors	49.99	44.99	39.99	34.99	29.99
SC903N	3-Way, NF Connectors	59.99	53.99	47.99	41.99	35.99
✓RoHS 2.4 GHz Signal Splitters						
SC2402N	2-Way, NF Connectors	39.99	35.99	31.99	27.99	23.99
SC2402RTM	2-Way, RP-TNC Connectors	49.99	44.99	39.99	34.99	29.99
SC2403N	3-Way, NF Connectors	59.99	53.99	47.99	41.99	35.99
SC2403RTM	3-Way, RP-TNC Connectors	69.99	62.99	55.99	48.99	41.99
SC2404N	4-Way, NF Connectors	69.99	62.99	55.99	48.99	41.99
✓RoHS 3.5 GHz Signal Splitters						
SC3502N	2-Way, NF Connectors	39.99	37.99	35.99	33.99	CALL
SC3504N	4-Way, NF Connectors	69.99	66.49	62.99	59.49	CALL
✓RoHS 5.8 GHz Signal Splitters						
SC5802N	2-Way, NF Connectors	99.99	89.99	79.99	69.99	59.99
SC5804N	4-Way, NF Connectors	159.99	143.99	127.99	111.99	95.99
✓RoHS Accessories						
ANM-TERM1	N-Male 50-Ohm Terminator, 0-6 GHz	7.99	7.67	7.35	6.79	5.99
HGX-PMT14	Splitter Mast MNT Kit, 1-1/4in to 2in Diameter	12.99	11.69	10.39	9.09	CALL
HGX-AMOUNT02	Splitter Wall/Enclosure MNT Kit	9.99	8.99	7.99	6.99	5.99

Item #	Description	1-9	10-24	25-99	100-249	250-499
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2.4 GHz 802.11b/g Compatible Ultra High Q 4-Pole and 8-Pole Wi-Fi Bandpass Channel Filters

L-com's HyperLink brand indoor and outdoor 2.4 GHz ultra-high Q Wi-Fi channel filters are ideal for co-located equipment installations. Available in seven versions for channels 1, 3, 6, 9, 11, 13 and 14, they provide excellent adjacent channel rejection. By reducing interference from both inside and outside the band, improved performance of co-located equipment can be achieved. These bandpass filters are bi-directional, so either end can be connected to the antenna. These filters are designed to be installed indoors or in weather-resistant enclosures. Both 4-Pole and 8-Pole models are offered.

✓RoHS 2.4 GHz Filters

BPF24-401	4-Pole, Indoor, Channel 1	69.99	64.39	58.79	53.19	CALL
BPF24-403	4-Pole, Indoor, Channel 3	69.99	64.39	58.79	53.19	CALL
BPF24-406	4-Pole, Indoor, Channel 6	69.99	64.39	58.79	53.19	CALL
BPF24-409	4-Pole, Indoor, Channel 9	69.99	64.39	58.79	53.19	CALL
BPF24-411	4-Pole, Indoor, Channel 11	69.99	64.39	58.79	53.19	CALL
BPF24-801	8-Pole, Indoor, Channel 1	89.99	82.79	75.59	68.39	CALL
BPF24-801A	8-Pole, Outdoor, Channel 1	124.99	114.99	104.99	94.99	CALL
BPF24-803	8-Pole, Indoor, Channel 3	89.99	82.79	75.59	68.39	CALL
BPF24-806	8-Pole, Indoor, Channel 6	89.99	82.79	75.59	68.39	CALL
BPF24-806A	8-Pole, Outdoor, Channel 6	124.99	114.99	104.99	94.99	CALL
BPF24-809	8-Pole, Indoor, Channel 9	89.99	82.79	75.59	68.39	CALL
BPF24-809A	8-Pole, Outdoor, Channel 9	124.99	114.99	104.99	94.99	CALL
BPF24-811	8-Pole, Indoor, Channel 11	89.99	82.79	75.59	68.39	CALL
BPF24-811A	8-Pole, Outdoor, Channel 11	124.99	114.99	104.99	94.99	CALL
BPF24-813	8-Pole, Indoor, Channel 13	89.99	82.79	75.59	68.39	CALL
BPF24-813A	8-Pole, Outdoor, Channel 13	124.99	114.99	104.99	94.99	CALL
BPF24-814	8-Pole, Indoor, Channel 14	89.99	82.79	75.59	68.39	CALL
BPF2400	4-Pole, Indoor, Full Band	99.99	91.99	83.99	75.99	CALL
BPF2400A	4-Pole, Outdoor, Full Band	149.99	137.99	125.99	113.99	101.99

✓RoHS 900 MHz Full Band Ultra High Q 4-Pole Indoor and Outdoor Bandpass Filters

HyperLink brand 900 MHz 4-Pole ultra-high Q full band filters are 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 as well as 900 MHz RFID applications. Both filters feature rugged aluminum construction. The BPF900 is designed for indoor use. For outdoor applications choose the BPF900A.

BPF900	4-Pole, Indoor, Full Band	99.99	91.99	83.99	75.99	67.99
BPF900A	4-Pole, Outdoor, Full Band	149.99	137.99	125.99	113.99	101.99

4.9 GHz and 5.8 GHz Full Band Ultra High Q 4-Pole Bandpass Filters

HyperLink brand 4.9 GHz and 5.8 GHz 4-Pole ultra high Q full band channel filters are ideal for co-located equipment installations. These filters are designed for full band applications. By reducing interference outside the respective bands (4900 MHz or 5800 MHz depending on model), improved performance on the co-located equipment can be achieved. These bandpass filters are wide enough to pass high data rate signals without degradation. Both filters feature rugged aluminum weatherproof construction and can be used indoors or outdoors.

✓RoHS 4.9 GHz Filters

BPF4900A	4-Pole, Outdoor/Indoor, Full Band	149.99	137.99	125.99	113.99	101.99
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✓RoHS 5.8 GHz Filters

BPF5800A	4-Pole, Outdoor/ Indoor, Full Band	149.99	137.99	125.99	113.99	101.99
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✓RoHS 2.4/5 GHz Diplexers

HyperLink brand 2.4/5 GHz diplexers are designed to split 2.4 GHz and 5 GHz from a single radio feed to separate 2.4 GHz and 5 GHz antennas. They can also be used to combine those frequencies into a single cable. HyperLink brand diplexers are available for indoor and outdoor applications and feature N-Female connectors.

- Covers entire 5 GHz range from 4.9 to 5.8 GHz

- Ideal for use with Multiband Access Points and Routers

DP245-NF	2.4/5.8 GHz, Outdoor, NF Connectors	49.99	44.99	39.99	34.99	CALL
DP2458-NF	2.4/5.8 GHz, Indoor, NF Connectors	139.99	125.99	111.99	97.99	CALL

✓RoHS Accessories

HGX-PMT14	Filter Mast Mount Kit, 1-1/4in to 2in Diameter	12.99	11.69	10.39	9.09	CALL
HGX-AMOUNT02	Diplexer Wall/Enclosure MNT Kit	9.99	8.99	7.99	6.99	5.99



[BPF24-806](#)



[BPF24-406](#)



[BPF2400A](#)

Did you know...

RF Filters reduce interference and improve performance?



[BPF5800A](#)



[DP245-NF](#)



[DP2458-NF](#)



Tip *Bandpass, Channel and Full Band Filters*

L-com offers two basic types of bandpass filters, channel and full band. A channel filter only allows signals within its pass band into the radio and rejects out of channel interferers. A full band filter allows signals within the full 802.11 pass band into the radio and rejects out of band interferers like the 1.9 GHz PCS band. L-com offers a full line of bandpass filters for 900 MHz, 2.4 GHz and 5 GHz radios that feature low insertion loss and superior rejection out of band signals. Learn more at www.L-com.com.



New



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