

# DIGICOMM BPF OPTICAL BAND PASS FILTERS (ISP) 2, 4, 5, 7, 10 AND 12-BAND

## FEATURES

- LGX Chassis-Compatible
- ½ Depth Module
- 100 GHz DWDM Channel Spacing (ITU G.694.1)
- ITU Channels 16-63
- LC/APC connectors
- Low-Insertion Loss
- High-Directivity
- Extensive Inventory IN-STOCK at our Distribution Center in Englewood, CO
- No Lead-Times
- Fast-Track Fulfillment (most orders ship same-day)



FOMD-BPFXX-LGX-LA

## OVERVIEW

Digicomm's family of BPF Optical Band Pass Filters are designed to maximize the capacity of existing fiber optic networks, and easily enable the transport of separate bands of DWDM channels to different locations within a network. The use of optical band pass filters greatly reduces the need to demultiplex an optical transport to individual wavelengths and then remultiplex those wavelengths into smaller groups, eliminating both signal loss and cost from the transport. Digicomm's BPF Optical Band Pass Filters provide flexibility, along with industry leading specifications. Digicomm's Optical Band Pass Filters use the standard ITU channel plan (ITU G.694.1), support 100 GHz channel spacing, and operate between ITU channels 16 and 63. All of Digicomm's Optical Band Pass Filters are standard LGX style, ½ depth, can be mounted inside a standard LGX passive chassis, and use LC/APC connectors. Digicomm's BPF Optical Band Pass Filters also include Dual Test Ports (transmit / receive) to assist with any network troubleshooting.

## SPECIFICATIONS

OPTICAL	2-BAND	4-BAND	5-BAND	7-BAND	10-BAND	12-BAND
Band XX to COM Insertion Loss $\leq$ dB	3.0	1.3	1.5	3.0	2.0	4.0
COM to TP Insertion Loss $\leq$ dB	22 $\pm$ 1	21 $\pm$ 1	21 $\pm$ 1	22 $\pm$ 1	21 $\pm$ 1	21 $\pm$ 1
EXP to COM Insertion Loss $\leq$ dB	0.8	0.8	N/A	N/A	N/A	N/A
UPG to COM Insertion Loss $\leq$ dB	2	2	N/A	N/A	N/A	N/A
Optical Return Loss $\geq$ dB	45	45	45	45	45	45
Polarization Dependent Loss, max $\leq$ dB	0.2	0.2	0.15	0.15	0.15	0.15
Ripple $\leq$ dB	0.4	0.4	0.5	0.5	0.5	0.5
Adjacent Channel Isolation $\geq$ dB	28	28	15	20	15	15
Connector Type	LC/APC	LC/APC	LC/APC	LC/APC	LC/APC	LC/APC
Power Handling (mW)	300	300	300	300	300	300

PHYSICAL	2-BAND	4-BAND	5-BAND	7-BAND	10-BAND	12-BAND
Dimensions (cm.)	12.9H, 7.6D, 2.9W	12.9H, 7.6D, 2.9W	12.9H, 7.6D, 2.9W	12.9H, 7.6D, 2.9W	12.9H, 7.6D, 2.9W	12.9H, 7.6D, 2.9W
Dimensions (in.)	5.1H, 3.0D, 1.14W	5.1H, 3.0D, 1.14W	5.1H, 3.0D, 1.14W	5.1H, 3.0D, 1.14W	5.1H, 3.0D, 1.14W	5.1H, 3.0D, 1.14W

ENVIRONMENTAL	2-BAND	4-BAND	5-BAND	7-BAND	10-BAND	12-BAND
Storage Temperature	-40° C to 85° C	-40° C to 85° C	-40° C to 85° C	-40° C to 85° C	-40° C to 85° C	-40° C to 85° C
Operating Temperature	-40° C to 85° C	-40° C to 85° C	-40° C to 85° C	-40° C to 85° C	-40° C to 85° C	-40° C to 85° C

## ORDERING INFORMATION

# OF BANDS	PART NUMBER	DESCRIPTION
2	FOMD-BPF2-1663-LGX-LA	MUX, 2 Band, LGX, Band 1: ITU 16-39, Band 2: ITU 40-63, LC/APC, COM, DTP
4	FOMD-BPF4-LGX-LA	MUX, 4 Band, LGX, Band 1: ITU 21-26, Band 2: ITU 28-39, Band 3: ITU 44-54, Band 4: ITU 57-62, LC/APC, COM, DTP
5	FOMD-BPF5-LGX-LA	MUX, 5 Band, LGX, Band 1: ITU 20-27, Band 2: ITU 28-35, Band 3: ITU 36-43, Band 4: ITU 44-51, Band 5: ITU-52-59 LC/APC, COM, DTP
7	FOMD-BPF7-LGX-LA	MUX, 7 Band, LGX, Bands: ITU 16-19, 20-27, 28-35, 36-43, 44-51, 52-59, 60-63 LC/APC, COM, DTP
10	FOMD-BPF10-LGX-LA	MUX, 10 Band, LGX, Bands: ITU 20-23, 24-27, 28-31, 32-35, 36-39, 40-43, 44-47, 48-51, 52-55, 56-59 LC/APC, COM, DTP
12	FOMD-BPF12-LGX-LA	MUX, 12 Band, LGX, Bands: ITU 16-19, 20-23, 24-27, 28-31, 32-35, 36-39, 40-43, 44-47, 48-51, 52-55, 56-59, 60-63 LC/APC, COM, DTP