

# UHF Bandpass filter, convection / liquid cooled

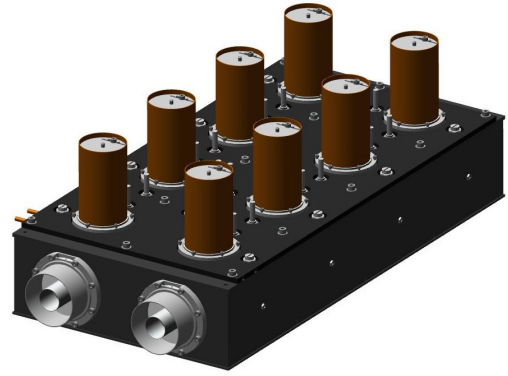
11 / 15 kW rms, 8 Pole, Low Loss

BAND IV-V

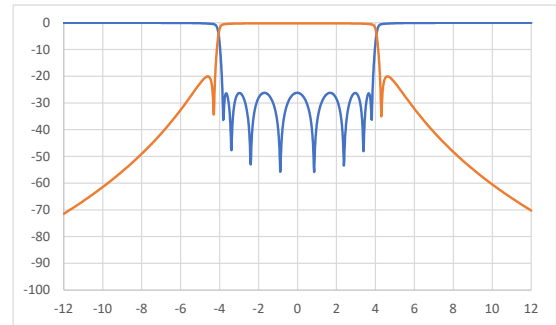
10  
year  
GUARANTEE

## PRODUCT FEATURES

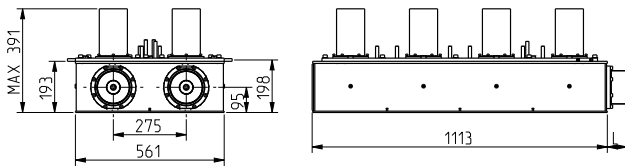
- Convection & Liquid cooled versions
- Retunable
- Compact design
- Low insertion loss
- Temperature compensated



SPECIFICATIONS	270 mm Series	
	Convection cooled	Liquid cooled
FREQUENCY	470 - 700 MHz	
BANDWIDTH	6 - 8 MHz	
STANDARD ORDER	8 Poles with single cross coupling	
OPTIONAL ORDER	8 Poles with double cross coupling or without	
ATV	Spurious suppress	
DVB	Critical mask	
ATSC	Stringent mask	
ISDB	Critical mask	
IMPEDANCE	50 Ohm	
VSWR	>26 dB (<1.11)	
TEMPERATURE STABILITY	< 2 kHz / °C	
MAX PRODUCT TEMPERATURE	70 °C	
ENVIROMENTAL CONDITION	-5 to 70 °C IP40	
STANDARD CONNECTION	3 1/8" unflange	
OPTIONAL CONNECTIONS	4 1/2" unflange, NAX120 unflange	
COOLING LIQUID CONNECTION	-	Ø10 mm (other upon request)
LIQUID FLOW	-	10 l/min (2.5 gal liq./min) Cooling capacity >900W
COOLING LIQUID TEMPERATURE	-	<=50°C (<=122°F)



DIMENSIONS AND WEIGHT	
DIMENSIONS	1160 x 561 x 250-391 mm
L x W x H	(45.7 x 22.1 x 9.8-15.4 in)
WEIGHT	61 kg (134 lb)
STANDARD FRAME	Stand alone
OPTIONAL FRAME	Custom frame
COLOUR	Frosted black



## ARTICLE: BPF48C27C-1N33

- BPF** = Filter type  
**4** = Frequency band  
**8** = Number of poles  
**C** = Cavity based  
**27** = Cavity size  
**C** = Version  
**1** = Number of cross coupling  
 0 = without, 1 = single, 2 = double  
**N** = Coating and cooling  
 W = blackpainted, silver plated, liquid cooled  
 N = blackpainted, silver plated, convection cooled  
**3** = Input connection  
 3 = 3 1/8" unflange, 4 = 4 1/2" unflange,  
 2 = NAX120 unflange  
**3** = Output connection  
 3 1/8" unflange, 4 = 4 1/2" unflange,  
 2 = NAX120 unflange

TYPICAL DATA*	8 MHz DVB-T2		6 MHz ISDB-T		6 MHz ATSC	
ARTICLE NO	BPF48C27C-1Nxx		BPF48C27C-1Nxx		BPF48C27C-1Nxx	
INSERTION LOSS	470 MHz	700 MHz	470 MHz	700 MHz	470 MHz	700 MHz
Avg. signal bandwidth	<0.26 dB	<0.31 dB	<0.33 dB	<0.40 dB	<0.25 dB	<0.30 dB
Centre frequency	<0.20 dB	<0.24 dB	<0.26 dB	<0.32 dB	<0.23 dB	<0.28 dB
Signal band edge	± 3.88 MHz	<0.63 dB	± 2.79 MHz	<0.49 dB	± 2.69 MHz	<0.10 dB
Rejection Δ-f0	± 4.2 MHz	>14 dB	± 3.15 MHz	>15 dB	± 3.5 MHz	-
		typical >15 dB		typical >20 dB		typical >0.5 dB
Rejection Δ-f0	± 6.0 MHz	>26 dB	± 4.5 MHz	>31 dB	± 6.0 MHz	>29 dB
		typical >31 dB		typical >32 dB		typical >43 dB
Rejection Δ-f0	± 12.0 MHz	>51 dB	± 9.0 MHz	>61 dB	± 9.0 MHz	>63 dB
		typical >69 dB		typical >70 dB		typical >64 dB
GROUP DELAY	<600 ns		<510 ns		<110 ns	
MAX INPUT POWER RATING, LIQUID COOLING**	15 kW	15 kW	15 kW	15 kW	15 kW	15 kW
	@ 13 dB (crest factor)		@ 13 dB (crest factor)		@ 11 dB (crest factor)	
MAX INPUT POWER RATING, CONVECTION COOLING***	13.3 kW	11.0 kW	10.5 kW	8.7 kW	13.6 kW	11.3 kW
	@ 13 dB (crest factor)		@ 13 dB (crest factor)		11 dB (crest factor)	
TEMPERATURE RISE	<3.7 °C/ kW	<4.5 °C/ kW	<4.8 °C/ kW	<5.7 °C/ kW	<3.7 °C/ kW	<4.4 °C/ kW
MASK COMPLIANT	Critical mask		Critical mask		Stringent mask	

\* Data in table is typical/ indicative data. To fulfil mask, transmitter shoulder level must be >36.2 dB. The filter can be tuned for other specifications or bandwidth. Please contact us for a designed specification.  
 \*\* Max input power with above cooling liquid flow and temperature. Change in the liquid flow and temperature can also change the actual power rating.  
 \*\*\* Max input power at <50 °C temp. rise and <20 °C ambient temperature. The unit must be positioned so that there are no obstructions to free air flow. Data are subjected to change without prior notice.