

# UHF Balanced Bandpass filter

## Convection / liquid cooled

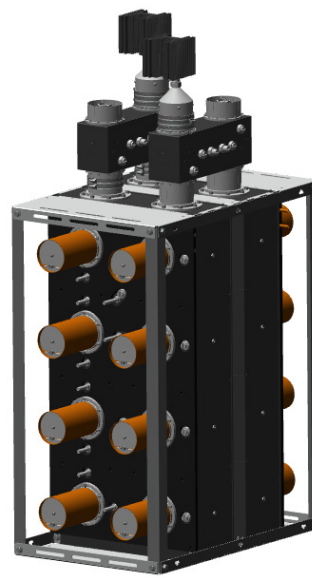
17.4 / 30 kW rms, 8 Pole, Standard

BAND IV-V

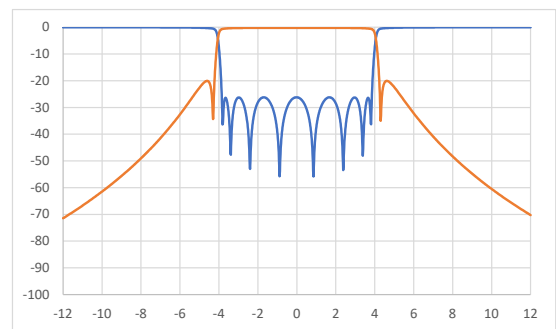
10 year GUARANTEE

### PRODUCT FEATURES

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

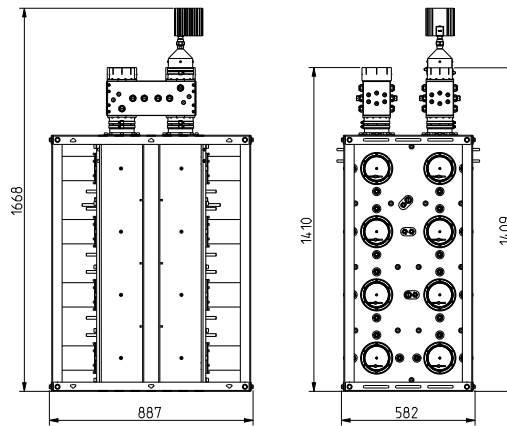


SPECIFICATIONS	270 mm Series	
	Convection cooled	Liquid cooled
FREQUENCY	470 - 700 MHz	
BANDWIDTH	6 - 8 MHz	
STANDARD ORDER	8 Poles with single cross coupling	
OPTIONAL ORDER	8 Poles with double cross coupling or without	
ATV	Spurious suppress	
DVB	Critical mask	
ATSC	Stringent mask	
ISDB	Critical mask	
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	887 x 582 x 1668 mm
L x W x H	(34.9 x 22.9 x 65.7 in)
WEIGHT	160 kg (353 lb)
STANDARD FRAME	Stand alone
OPTIONAL FRAME	Custom frame
COLOUR	Frosted black



### ARTICLE: BBPF48C27C-1P33

- BBPF** = 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  
**P** = Coating and cooling  
 V = blackpainted, liquid cooled  
 P = blackpainted, 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	BBPF48C27C-1Pxx		BBPF48C27C-1Pxx		BBPF48C27C-1Pxx	
<b>INSERTION LOSS</b>	470 MHz	700 MHz	470 MHz	700 MHz	470 MHz	700 MHz
Avg. signal bandwidth	<0.39 dB	<0.48 dB	<0.48 dB	<0.59 dB	<0.38 dB	<0.47 dB
Centre frequency	<0.32 dB	<0.38 dB	<0.40 dB	<0.48 dB	<0.36 dB	<0.43 dB
Signal band edge	± 3.88 MHz	<0.83 dB	± 2.79 MHz	<0.67 dB	± 2.69 MHz	<0.21 dB
Rejection Δf0	± 4.2 MHz	>14 dB	± 3.15 MHz	>15 dB	± 3.5 MHz	-
		typical >15.6 dB		typical >20 dB		typical >0.6 dB
Rejection Δf0	± 6.0 MHz	>26 dB	± 4.5 MHz	>31 dB	± 6.0 MHz	>29 dB
		typical >31 dB		typical >32 dB		typical >42 dB
Rejection Δf0	± 12.0 MHz	>51 dB	± 9.0 MHz	>61 dB	± 9.0 MHz	>63 dB
		typical >69 dB		typical >70 dB		typical >64 dB
<b>GROUP DELAY</b>	<600 ns		<510 ns		<110 ns	
<b>MAX INPUT POWER RATING, LIQUID COOLING**</b>	30 kW	30 kW	30 kW	30 kW	30 kW	30 kW
	@ 13 dB (crest factor)		@ 13 dB (crest factor)		@ 11 dB (crest factor)	
<b>MAX INPUT POWER RATING, CONVECTION COOLING***</b>	22.1 kW	17.4 kW	17.3 kW	13.7 kW	22.5 kW	17.7 kW
	@ 13 dB (crest factor)		@ 13 dB (crest factor)		11 dB (crest factor)	
<b>TEMPERATURE RISE</b>	<2.3 °C/ kW		<2.9 °C/ kW		<2.2 °C/ kW	
	<2.9 °C/ kW		<3.7 °C/ kW		<2.8 °C/ kW	
<b>MASK COMPLIANT</b>	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.