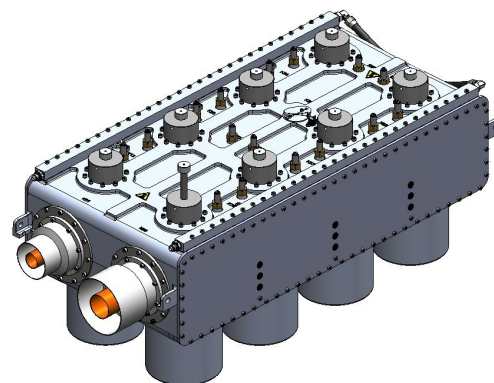




The RFS 8PPXX202C is designed for global filtering applications associated with DTV television transmission. It is an 8-pole fan cooled filter incorporating two cross-couplings to meet all mask requirements.

FEATURES / BENEFITS

- Very compact for easy integration into equipment.
- Very low insertion loss (lowest for this size).
- Highest power rating for size/class.
- Tunable over full VHF band (170 – 230 MHz).
- Adjustable bandwidth, available for 6 and 7 MHz channels for global applications.
- External, non-invasive coupling adjustment.
- Tunable for ETSI, ISDB-T critical and ATSC 1.0 and ATSC 3.0 applications.
- -5 to 55°C degree ambient temperature operation.
- 115V (50/60Hz) and 230V (50/60Hz) fan cooling kits available in place of liquid cooling.



8PPXX201C Liquid Cooled Filter shown

Technical features

GENERAL SPECIFICATIONS

Product Line		Filters
Product Type		Band III (VHF) TV Bandpass Filter
Model		8PPXX202C
Filter type		8 Pole with 2 cross couplings - 200 mm ground plane spacing
Input / Output Connector		3-1/8" EIA Unflanged Female (Standard) or 4-7/8" EIA Unflange Female (Standard) 4-1/2" IEC Unflanged Female (Optional) or 4-1/16" Flanged MYAT (Optional)

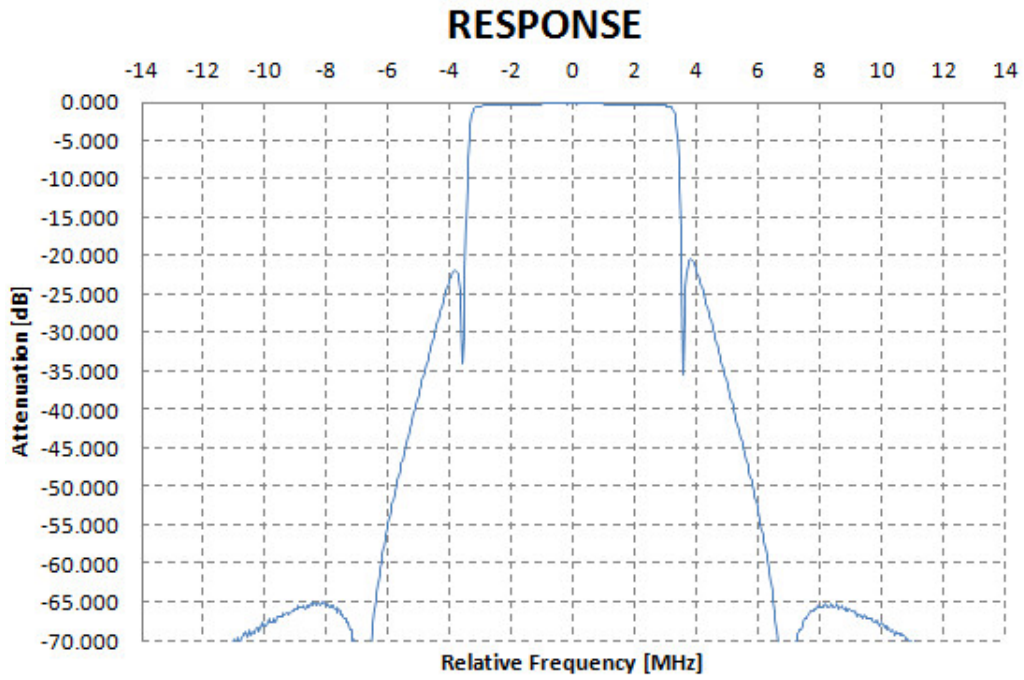
MECHANICAL SPECIFICATIONS

Dimensions-WxDxH	mm (in)	1037 x 439 x 473 (40.8 x 17.3 x 18.6)
Color		Black
Weight	kg (lb)	82 (180.4)

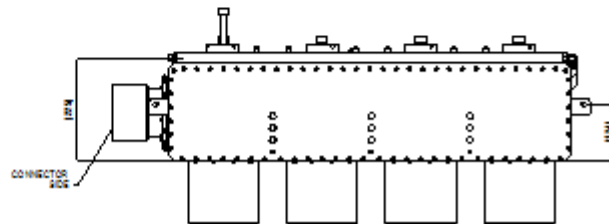
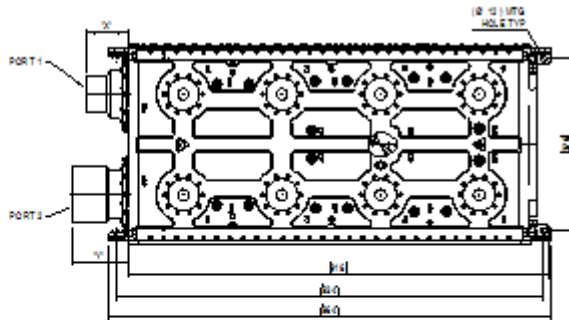
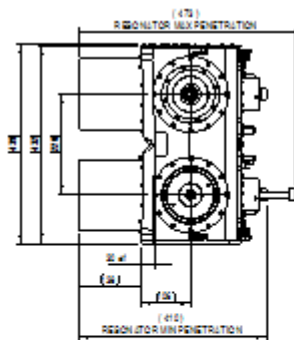


SPECIFICATIONS

Out-of-Band Emissions Mask		DVB-T ETSI critical	ISDB-T critical	ATSC1.0 and ATSC 3
Channel Bandwidths	MHz	7	6	6
Frequency Range	MHz	170-230		
Input Power Rating	kW	23@ 177.5MHz 23 @ 226.5MHz	20 @ 173MHz 20 @ 219MHz	22 @ 177MHz 22 @ 213MHz
Output Power Rating	kW	22 @ 177.5MHz 22 @ 226.5MHz	19 @ 173MHz 19 @ 219MHz	21 @ 177MHz 21 @ 213MHz
Insertion Loss at Fc	dB	<0.19 @ 177.5MHz <0.19 @ 226.5MHz	<0.23 @ 173MHz <0.23 @ 219MHz	<0.22 @ 177MHz <0.22 @ 213MHz
Attenuation	dB	<0.50 at Fc ±2.85 MHz >15 at Fc ±3.7 MHz >27.0 at Fc ±5.25 MHz >52.0 at Fc ±10.5 MHz >58.0 at Fc ±11.75 MHz	<0.70 at Fc ±2.79 MHz >14.0 at Fc ±3.15 MHz >31.0 at Fc ±4.5 MHz >61.0 at Fc ±9.0 MHz	<0.43 at Fc ±2.69 MHz <0.53 at Fc ±2.915 MHz >20.0 at Fc ±3.5 MHz >20.0 at Fc ±4.0 MHz >40.0 at Fc ±6.0 MHz >65.0 at Fc ±9.0 MHz NOTE 1
VSWR average across carriers		<1.1	<1.1	<1.1
Return Loss Average Across Carriers	dB	26.4	26.4	26.4
Group Delay Variation	ns	<690 at Fc ± 2.85 MHz	<590 at Fc ± 2.79 MHz	<290 at Fc ±2.69 MHz <350 at Fc ±2.915 MHz
Maximum Operating Temperature	°C (°F)	80 (176)		
Ambient Temperature Range	°C (°F)	-5 to 55 (23 to 131)		
Maximum Temperature Rise	°C (°F)	40 (104)		
Freq Drift - Tx Operation	kHz/°C(°F)	<2 (1.2)		
Freq Drift - Ambient Temperature	kHz/°C(°F)	<2 (1.2)		



8PPXX201C Filter Response- pending Ben S confirmation if same for 202C



8PPXX201C Filter Dimensions

External Document Links

Notes

NOTE 1. TX Intermod shoulders 37 dB.