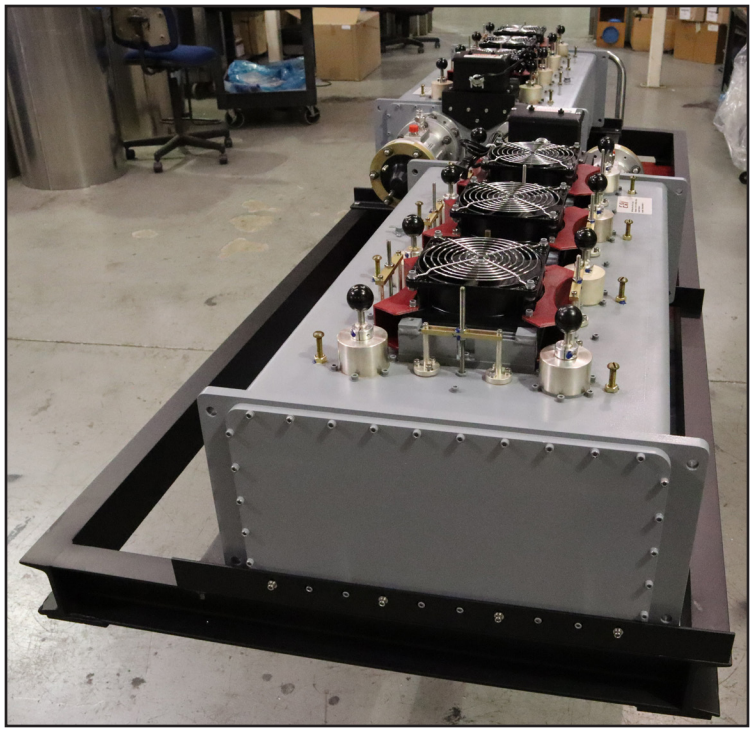
UF-3000/5000A Series Sixteen-Pole UHF Bandpass Filters

The UF3000-16x and UF5000A-16x UHF bandpass filters are band tunable and provide an economical alternative to the traditional 12 and 14 pole filters typically used to protect T-Band land mobile radio services. The bandpass filter is consists of two (2) eight-section bandpass filters connected in series. The UF3000 is rated for 3.0 kW average power at the filter output and is convection cooled. The Model UF5000A adds forced air cooling, increasing the power handling capability to 5.0 kW. Based on laboratory testing, the patent-pending targeted forced air-cooling system utilizes distributed finned heat sinks with individual cooling fans to target those locations that generate the most heat. The system provides better heat removal using lower volumes of targeted airflow. It has the benefits of producing less ambient noise and lower power consumption than traditional forced air-cooling methods.

The filters are constructed of a lightweight Aluminum case with brass resonators. The Evanescent coupled TEM resonators are durable and provide a rugged design that tunes easily. Tuning elements are designed with the tuner in mind, allowing precise tuning for today's stringent applications in significantly less time for additional cost savings. Multiple cross-couplings are provided to increase the rejection of transmitter out of band emissions. Input and output connections are 1-5/8, 3-1/8, or 4-1/16-inch, unflanged.



UF3000/UF5000A 16-Section UHF Bandpass Filter:

- ATSC, DVB-T and ISDB-T
- Tunable for 6, 7, or 8 MHz Channels
- Non-Critical and Critical Masks
- Temperature Compensated
- UF5000A includes patent-pending targeted forced air-cooling

Optional Items:

- Fine-Matchers to optimize system performance
- Directional Couplers to monitor system performance
- Output Switching/Patching to test system performance
- Low Pass Harmonic Filters

Typical Specifications		
Model:	**UF3000-16x**	**UF5000A-16x**
Poles:	16 (two (2) 8-section filter in series)	
Cooling:	Convection	Forced Air
Power Handling:	3.0 kilowatts	5.0 kilowatts
Frequency Range:	470 to 689 MHz	
VSWR (Passband), maximum:		
ATSC	1.08	
Insertion Loss, Fc:		
ATSC	1.00 dB	
Group Delay (typical):		
ATSC	< 1600 nsec	
RF Connectors:	X=2 1-5/8-inch, X=3 3-1/8-inch, or X=4 4-1/16-inch unflanged	
Physical Size:		
Length	83.5 inches	(2121 mm)
Width	29.6 inches	(753 mm)
Height	17.8 inches	(452 mm)
Weight	264 pounds	284 pounds
	(119.7 kg)	(128.8 kg)
Operating Temperature:	68 to 95 degrees F	(20 to 35 degrees C)
Storage Temperature:	32 to 122 degrees F	(0 to 50 degrees C)
Ambient Humidity:	95% Relative Humidity, Non-condensing	

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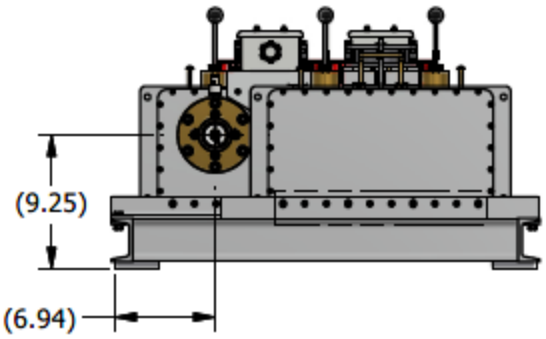

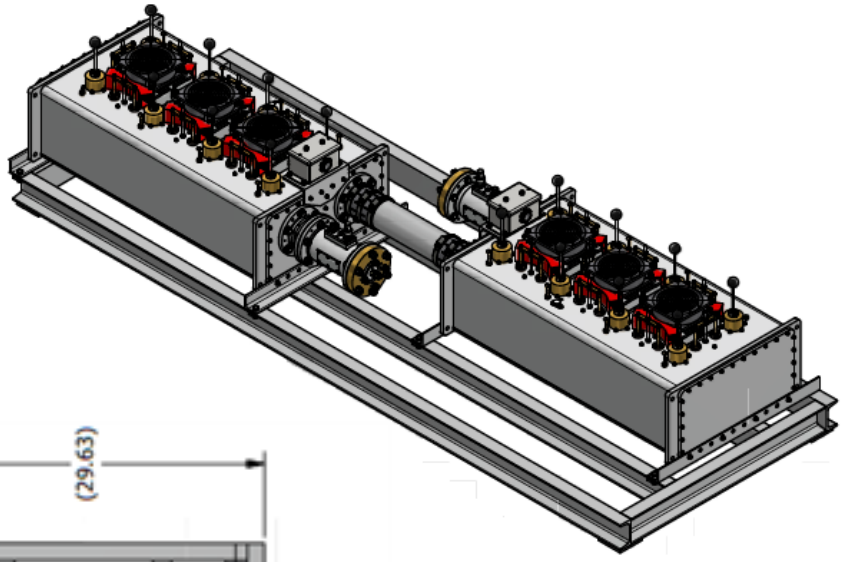

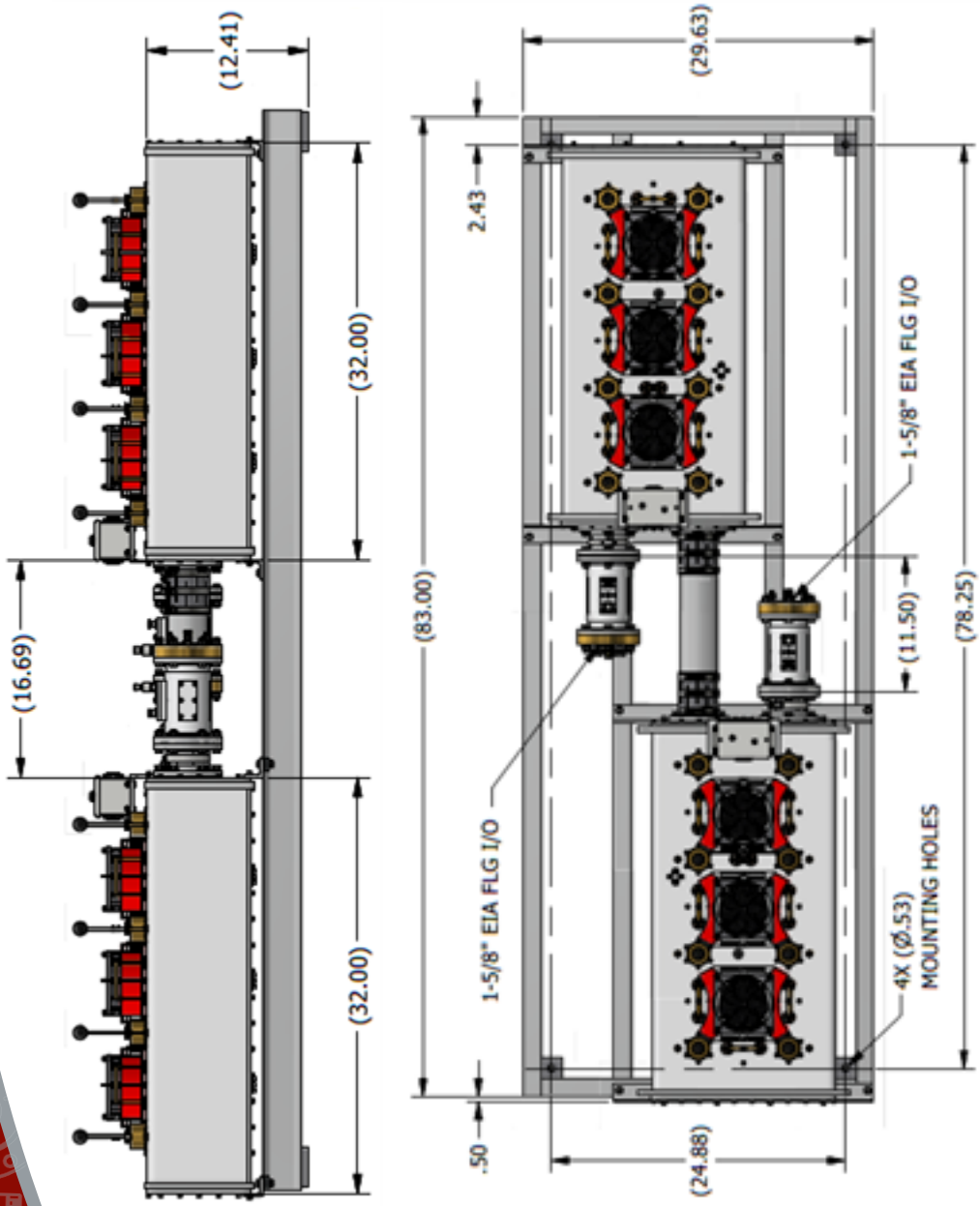

Rejection (typical):		
-9.00 MHz	<	-78.0 dBc
-7.00 MHz	<	-72.0 dBc
-3.90 MHz	<	-48.0 dBc
-3.50 MHz	<	-48.0 dBc
-3.30 MHz	<	-63.0 dBc
-3.15 MHz	<	-55.0 dBc
2.90 MHz	>	-9.0 dBc
-2.69 MHz	>	-1.4 dBc
0.00 MHz	>	-1.0 dBc
2.69 MHz	>	-1.4 dBc
3.00 MHz	>	-8.0 dBc
3.50 MHz	<	-35.0 dBc
9.00 MHz	<	-65.0 dBc