



ERI[®]

NextGenTV compatible
**is ATSC 3.0
Ready!**

TV Antennas

UHF

VHF High Band

TRASAR[®]

The TRASAR[®] High Power Slotted Array UHF and VHF Television Antenna offers broadcasters a flexibility in design coupled with high quality and proven performance. Computer aided design tools and anechoic chamber testing allow for custom solutions that meet your specific needs while allowing for optimization in tower design and coverage considerations.

AL Series[™]

The AL Series Side Mount Low and Medium Power Antenna is available in 4, 6 and 8-bay models and available with horizontal, elliptical or circular polarization. All versions include a slot cover for protection from snow and ice. The AL Series family includes non-directional models as well as five (5) standard directional azimuth patterns.

ALPLUS[™] Series

The AL PLUS is available in 8 and 12 bay models and versions have been developed for low and medium power applications. The antenna is a coaxial slotted array design that yields excellent azimuth and elevation pattern performance. Models are available with horizontal, elliptical, and circular polarization. The AL PLUS UHF television antenna line satisfies the antenna requirements of many Part 74 television translators, low power and Class A television stations and single frequency networks. The antenna is a compact, end fed, design that includes a radome slot cover for icing and moisture protection.

ALP[™] Series

The ALP Series II Side Mount Low and Medium Power Antennas, for UHF television and Mobile Media applications, are lightweight, low windload, and easily installed which reduces installation time and costs. The ALP antennas offer the quality and performance needed to improve coverage and maintain competitiveness in today's broadcast marketplace.

ERI/iTECH i230ECx SUPERPANEL[™]

The i230ECx is a compact broadband side mounted UHF television antenna suitable for main and auxiliary applications with both horizontal or elliptical polarizations. The antenna is configured in a compact cylindrical radome, is very lightweight and low wind load.

ERI/IRTE UHF Panels

The UHF panels offered by ERI are based on two well established designs manufactured by IRTE. For normal power horizontal polarization requirements, the standard panel is available to provide up to 2.5 kW average power handling per panel. For increased power requirements, the high power version of the panel is available to provide a capability of up to 5 kW, average power, per panel. The UHF panels are also offered in Elliptical polarization with 2.5kW per input of the dual input antenna.

ALV Series

ERI's ALV Series high band VHF television antenna is a new lightweight, side mounted, family of high band VHF television antennas available in 2, 4, and 8 bay configurations with omnidirectional and Omnioid (Skull) standard azimuth patterns. The antenna is available for any single Band III RF Channel from 7 through 13. ALV Series antennas are rated for up to 32 kW average input power. The ALV series is ruggedly constructed and is suitable for use as a main or auxiliary antenna.

ETV Series Circularly Polarized Broadband

The Electronics Research ETV Series high band VHF television antennas is a circularly polarized high band VHF panel antenna element. As with all ERI antenna systems these panel elements can be designed to mount on existing towers or supplied with integrated top or side mounted spines. Systems are available in configurations for three (3) curtain (for triangular towers) or four (4) curtain (for square towers) arrays. The elements and full arrays can be configured and optimized for a single high band VHF television channel, 174 MHz to 216 MHz, or be optimized to cover the entire channel span from 7 to 13 and handle multiple television signals in a single system. ERI can also provide channel combiners as a part of a complete system.

ETV Series Horizontally Polarized High Band

The Electronics Research ETV-H Series high band VHF television antenna is a horizontally polarized high band VHF panel antenna element which is supplied as a system. As with all ERI antenna systems these panel elements can be designed to mount on existing towers or supplied with integrated top or side mounted spines. Both models are available in configurations for three (3) curtain (for triangular towers) or four (4) curtain (for square towers) arrays. The elements and full arrays can be configured and optimized for a single high band VHF television channel, 174 MHz to 216 MHz, or be optimized to cover the entire channel span from 7 to 13 and handle multiple television signals in a single system. ERI can also provide channel combiners as a part of a complete system.

See Typical Azimuth Radiation Patterns on the following pages.

Electronics Research, Inc • +1 (812) 925-6000 • 7777 Gardner Rd, Chandler, IN 47610

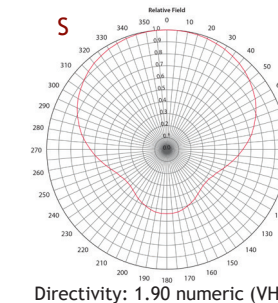
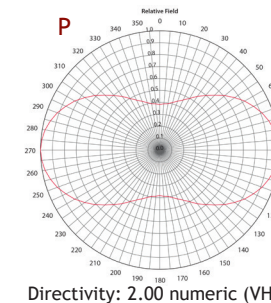
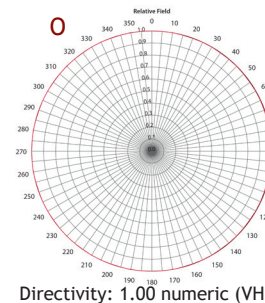
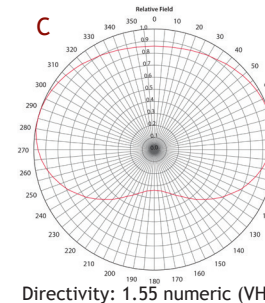
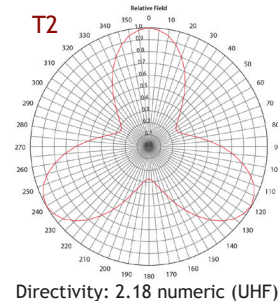
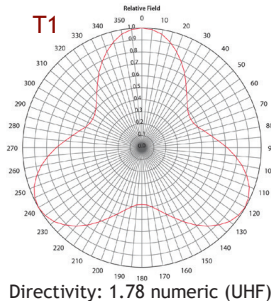
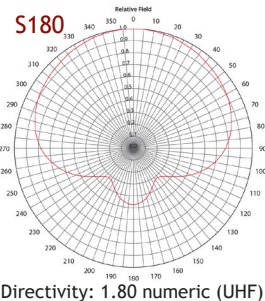
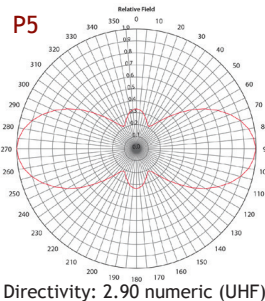
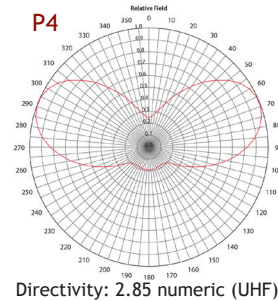
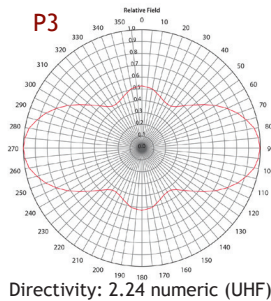
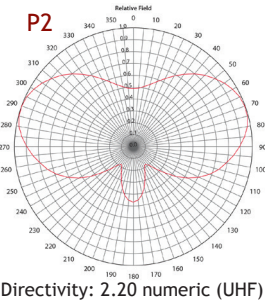
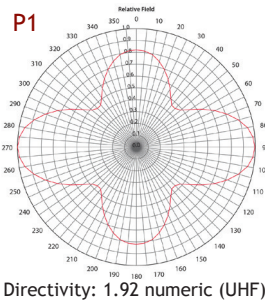
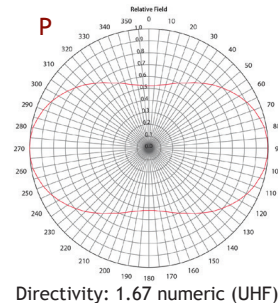
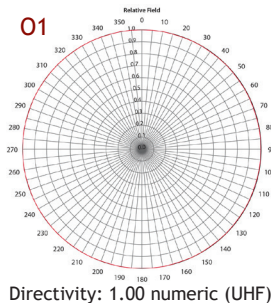
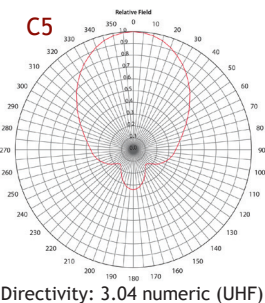
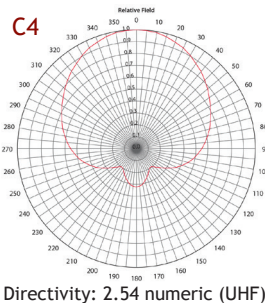
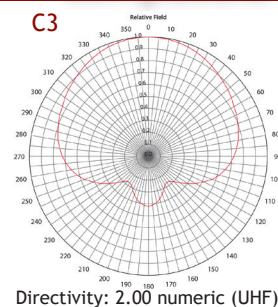
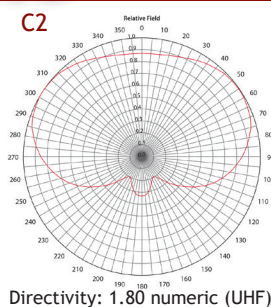
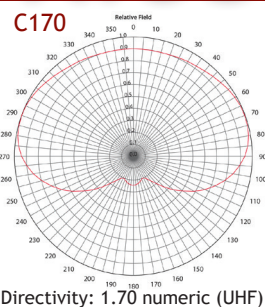
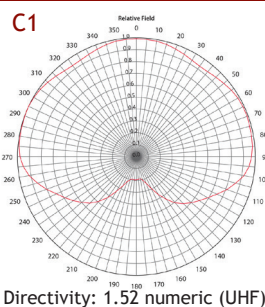
UHF and VHF TRASAR® patterns

- Top, Side or Invert mounted
- End-fed
- Smooth pattern
- Separate V-Pol dipoles
- Pressurized or Unpressurized
- Slot covered or full radome enclosure
- Customized azimuth and elevation patterns available
- Heavy null fill is standard

For applications demanding the highest in quality and proven performance for optimum coverage, ERI TRASAR® High Power Transmitting Antennas are the ideal choice.

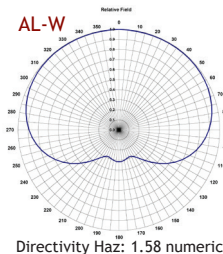
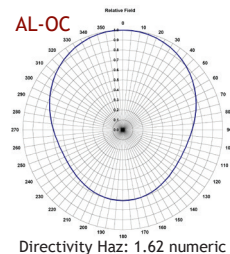
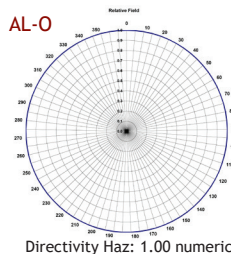
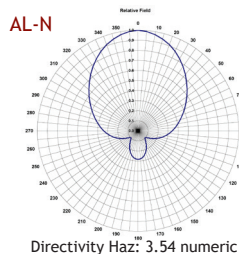
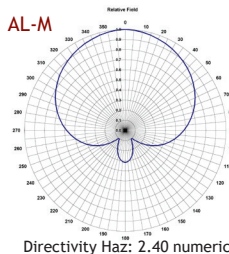
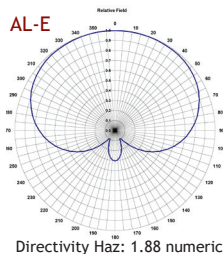
Flexibility in design, computer aided design tools, and anechoic chamber testing allow us to provide you with custom solutions that meet your specific needs while aiding you to optimize tower design and coverage considerations.

Value and reliability are built into TRASAR antennas. Direct slotted line measurement of antenna VSWR at the input flange ensures very low reflected power and a top quality signal. Lightning protection and internal DC grounding across the internal feed line protects the antenna from lightning damage.



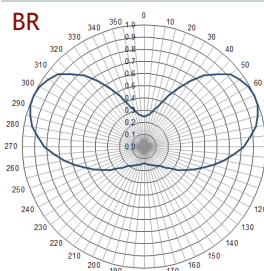
AL™ Series & AL Plus™ Series

The AL & AL Plus Series Side Mount Low and Medium Power Antenna, for UHF (CCIR Band IV/V) television applications, are designed for UHF translator and low power applications. The antenna is a coaxial slotted array design that yields excellent azimuth and elevation pattern performance. The antenna is available with horizontal, elliptical or circular polarization. All versions include a slot cover for protection from snow and ice. The AL & AL Plus Series families includes non-directional models as well as five (5) standard directional azimuth patterns.

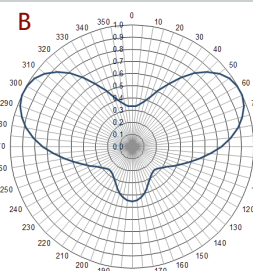


ALP™ Series Low & Medium Power UHF

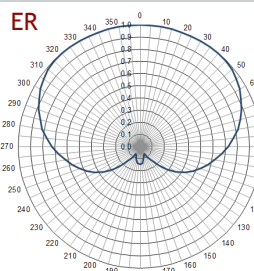
The ERI ALP™ Series II antennas deliver the versatility, power, and reliability that are the keys to success in today's competitive broadcast marketplace. For full-power stations transitioning to DTV, ALP antennas offer field-proven solutions. Broadcasters with medium power requirements can benefit from this antenna's lightweight, low wind loads, and easy installations which provide reductions in installation time and costs. This product has an 18MHz bandwidth with slightly higher VSWR of 1.15:1.



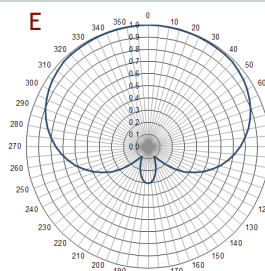
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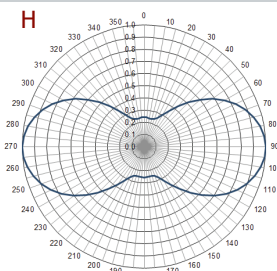
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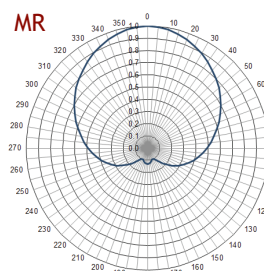
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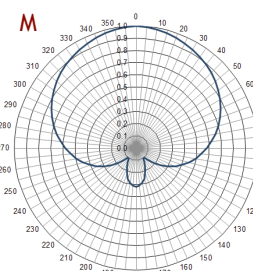
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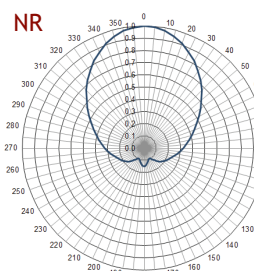
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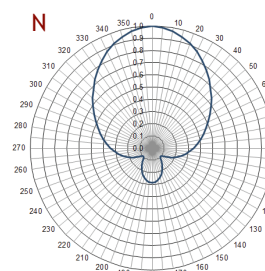
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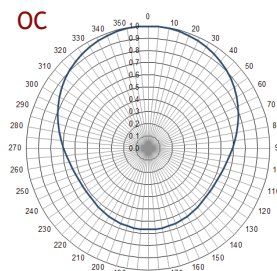
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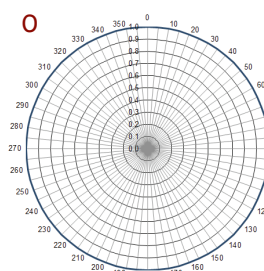
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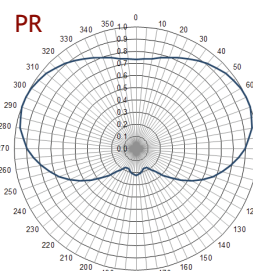
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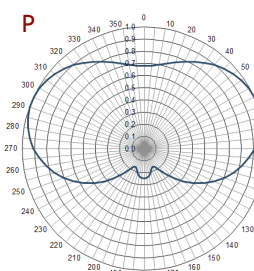
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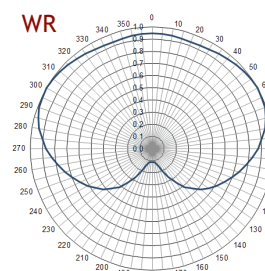
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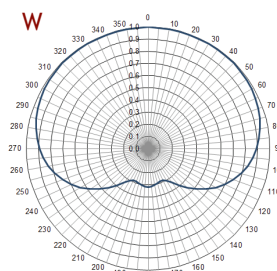
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Directivity Haz-1.94 numeric



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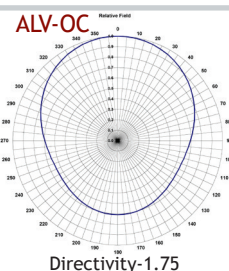


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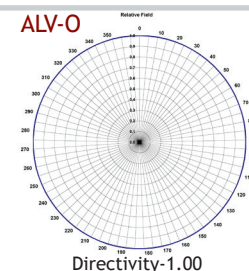
ALV™ Series High Band VHF

- Light weight side mounted television antenna
- Unpressurized slot covers
- 2, 4, and 8 bay models standard
- Includes brackets for leg or pole mounting

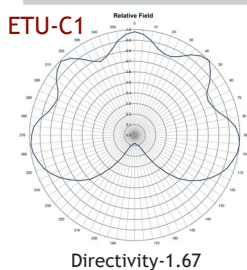
The ALV Series is an end fed antenna which provides benefits in terms of simplicity and reliability and eliminates any external power dividers or feed cables. The RF input is 3-1/8-inch EIA flanged, male. The antenna includes standard brackets for side mounting on a tower leg or pole from 1.5 inches (38 mm) to 7.5 inches (190 mm) OD.



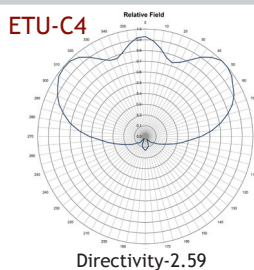
Directivity-1.75



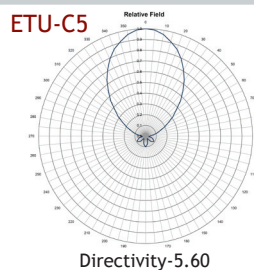
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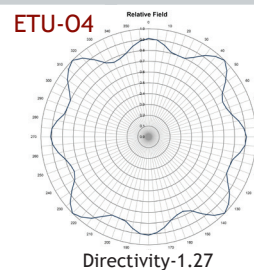
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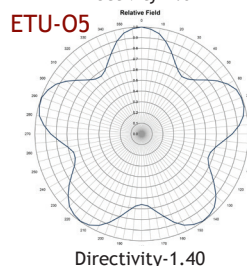
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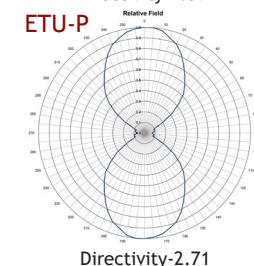
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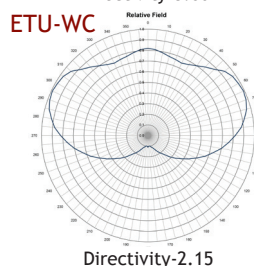
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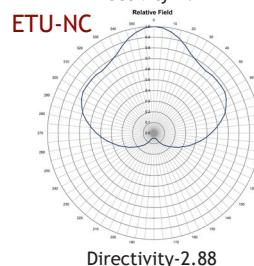
Directivity-1.40



Directivity-2.71



Directivity-2.15



Directivity-2.88

ERI/IRTE UHF Panels

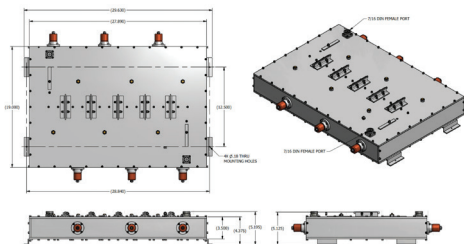
These broadband, horizontal or elliptical polarization panels designed by IRTE provide 2.5kw per input (Horizontal (1)Input, 2.5kw & elliptical (2) inputs, 5kw average power). The horizontal polarization panel also provides a high power version w/ 5.0kw average power rating per panel.

ERI/iTECH i230ECx SUPERPANEL™

This broadband antenna is suitable for single channel systems or for the combined operation of more than one television station in a single antenna. The 8-bay module is rated for 20 kW average power, 10 kW per input. There are standard system configurations for 8, 16 and 24 bays with array power handling capability up to 60 kW average power. The 16 and 24 bay configurations include the required power divider and feed harness.

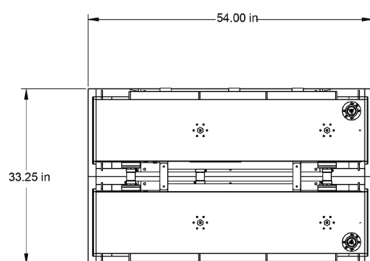
VHF Filters/Combiners

ERI has decades of expertise and experience in engineering and designing filter, channel combining, and power combining systems. That is why demanding television broadcast markets both in the US and around the world turn to us for their digital VHF television filtering and channel and power combining needs.



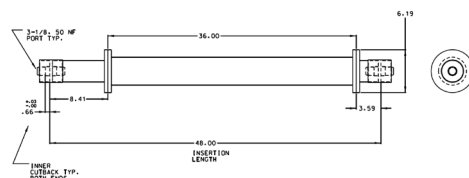
High Band VHF Band Pass Filters

ERI's high band VHF band pass filters are band tunable designs available in 6 and 8 section versions in both reflective and constant impedance configurations. Standard model designs are available to handle one to 10 kilowatts.



Low Band VHF Band Pass Filters

ERI offers a full suite of products for Low Band VHF applications. These include reflective and constant impedance band pass filters, low pass harmonic filters, and the accessory RF components required to produce complete systems. In addition to providing filter sets for spurious emissions compliance ERI also can provide filter sets for channel combining.



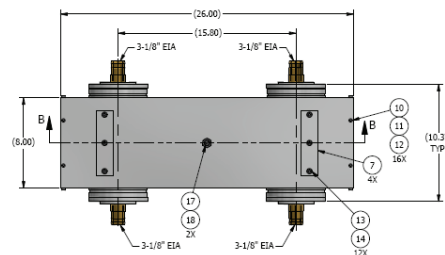
High Band VHF Low Pass Harmonic Filters

ERI offers a series of high rejection, low-pass harmonic filters for transmitter power levels up to 45 kW for high band VHF applications. Chebyshev design parameters define element values which, when synthesized, provide 40 dB or greater rejection at the 2nd harmonic and greater than 50 dB to the 5th harmonic. The oversized center section ensures optimal power handling capability. Each filter is individually tested and tuned for optimum electrical and mechanical performance. Measured test data is supplied with each filter.



Low Band VHF Low-Pass Harmonic Filters

ERI offers a series of high rejection, low-pass harmonic filters for transmitter power levels up to 45 kW for low band VHF applications. Chebyshev design parameters define element values which, when synthesized, provide 40 dB or greater rejection at the 2nd harmonic and greater than 30 dB to the 5th harmonic. The oversized center section ensures optimal power handling capability. Each filter is individually tested and tuned for optimum electrical and mechanical performance. Measured test data is supplied with each filter.



High Band VHF Power Combiners and Hybrids

ERI manufactures a wide variety of switching and switchless power combiners for High Band VHF television applications. All systems include the ability to bypass the combiner and put a single cabinet on-air for periodic maintenance and emergency operation. The company also manufactures hybrid splitters and combiners as well as patch panel switching systems.

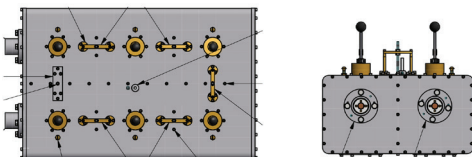
Contact ERI for special configurations.

Rigid Coaxial Transmission Line

MACXLine® rigid coaxial line with bellows is available from ERI in sizes from 3-1/8 inch through 8-3/16 inch. ERI also offers **STDLine** for interior and short run applications, both flanged and unflanged components from 7/8 inch through 8-3/16 inch sizes. **1329Line** is an aluminum outer conductor rigid line product that uses **MACXLine** inner conductors and is an economical and lighter weight alternative to traditional copper/brass rigid line.

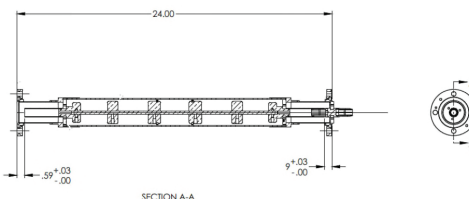
UHF Filters/Combiners

ERI manufactures UHF low pass harmonic filters and UHF television band pass filters in both reflective and constant impedance configurations. The company builds a complete suite of accessory products including switches, directional couplers, hybrid power combiners, and RF loads.



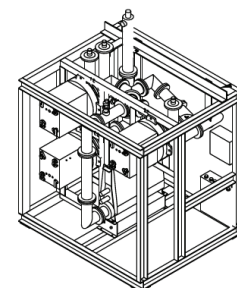
UHF Band Pass Filters

The UF Series UHF band pass filters are tunable and exceptionally efficient available in models to accommodate 1500 watts to 40 kilowatts. Higher power requirements are addressed with constant impedance configurations employing these tunable band pass filters. Six and eight pole designs are available for any 8-VSB and COFDM applications.



UHF Low Pass Harmonic Filters

ERI high rejection UHF coaxial low-pass harmonic filters are designed for transmitter power levels up to 28 kW, average power. Chebyshev design parameters define element values that provide 40 dB or greater rejection at the second harmonic and 30 dB or greater rejection at the third harmonic.



UHF Switching and Switchless Combiners

ERI manufactures a wide variety of switching and switchless power combiners for UHF television applications. The all systems include the ability to bypass the combiner and put a single cabinet on-air for periodic maintenance and emergency operation.