

Electronics Research, Inc. - Your Single Source for Broadcast Solutions™



# **75**

# Years of Broadcast Solutions

ERI leads the industry in the designing, manufacturing, and installing of antenna and tower technology for TV and radio broadcasters.

One-step & future-ready ..

More About Us —

# **About ERI**

In addition to our antenna technology expertise, we have a deep focus on safety compliance and training. Our state-of-theart facilities, future focus, and end-to-end in-house manufacturing processes allow us to deliver a superior custom product.

### **ERI Product Differentiators**

Out of the box, ERI's standard antennas perform better than any competitors' top-line antennas.

Our TRASAR® smooth end-fed antennas eliminate elevation pattern nulls so that coverage is smooth throughout the antenna's range. With an end-fed setup, we can also control the direction and intensity of the signal pattern to give greater focus to the target.



### **ERI** Capabilities

ERI is the only company that can provide complete engineering, manufacturing, design, and installation of antennas as well as a highly trained tower crew.



**Planning:** A custom solution is created for each customer and project managed from cradle-to-grave by ERI's in-house PM team.



**Testing:** We have the largest anechoic chambers dedicated to broadcast work in North America. We can create large models and test custom designs, even for high-band VHF.



**Production:** Our in-house production process allows us to produce and install multiple high powered TRASAR® antennas per month and provide customers with accurate timelines for end-to-end completion of work. Our high-strength steel towers are constructed with precision and safety as top priorities.



**Process control:** ERI controls the product at every stage of production, enabling us to be faster to market and take complete ownership of product quality.



**Installation:** ERI is the only antenna manufacturer with certified tall-tower crews on staff to install and service our antennas in the field with all policies and procedures adhering to governing construction standards including the ANSI/TIA-322 and ANSI/ASSE A10.48.

ERI's unique end-to-end process delivers custom engineered solutions to the most demanding projects.

### ERI Antenna Advantages vs. The Competition

### End-Fed TRASAR® Antenna (ERI)

- Smooth signal pattern with no deep nulls
- Optimal for electrical beam tilts greater than 1/2 degree
- Unparalleled pattern control and energy efficiency
- Complete antenna mounting solutions (top or side mount) for all ERI manufactured antennas

### **Center-Fed Antenna (Competition)**

- Heavy nulls in signal
- Compromised performance for electrical beam tilts greater than 1/2 degree
- Constraints on pattern and gain result in lower energy efficiency
- Antenna mounts designed/supplied by others

### ERI TRASAR® Antenna Features

- ATSC 3.0 Compliance: Our antennas are ATSC 3.0 ready, unlike many competitors' base models. That means broadcasters will be ready to meet compliance standards without making modifications.
- Separate horizontal and vertical elements: Through targeted horizontal and vertical polarization, ERI
  creates independent horizontal and vertical coverage patterns. This allows for greater customization to
  the broadcaster's specification.
- A pressurized radome that is fully waterproofed and resistant to barometric pressure helps prevent
  moisture from being drawn into the radome.
- A dedicated climbing facility with all components located outside the antenna's radome allows
  technicians to safely access and perform routine inspections. This is a significant improvement
  compared to penetrated fiberglass step peg designs which conceal the most critical end attachment
  points.
- More transmission power: Our competitors require an addition of transmitter power to fill coverage
  pattern nulls. ERI's end fed antennas are naturally null-free and don't require future modification in the
  field or additional transmitter power to support ATSC 3.0.
- Tip Deflection: TRASAR® antennas are designed to a high structural standard based on mechanical
  deflection at the tip of the antenna, not at a midpoint along the antenna body. This creates a stronger,
  more rugged antenna, as well as more consistent coverage.
- Customization that lets broadcasters target specific markets and expand on the audiences they are
  able to reach.
- Enhanced mechanical performance criteria: ERI's in-house structural engineering department employs advanced mechanical design principles that exceed minimum requirements of the current ANSI/TIA-222 standard to ensure superior performance under design and service loads.

### Certifications



Fabrication shop certified with American Institute of Steel Construction (AISC)



Star Certified Installations Department with National Association of Tower Erectors (NATE)

# Contact Us

eriinc.com

7777 Gardner Road Chandler, IN 47610-9219, USA

+1 (812) 925-6000 (General)

+1 (877) 374-5463 (Toll-Free)

+1 (812) 925-4030 (Fax)

sales@eriinc.com

We are eager to show you how ERI's unique capabilities can add value to your next project. Contact us to discuss your needs and get a custom proposal.

