



Antenna Test & Measurement Frequency Extension Systems

Farran's AET and AER frequency extenders are a dedicated Test & Measurement solution for antenna performance verification.

The system comprises of the transmitter and receiver units that enable antenna radiation pattern, gain and phase polarisation measurement in the near-field and far-field up to 500 GHz.

This compact and lightweight system allows you to use your existing baseband vector network analyzer and extend its operational range to the frequency of interest. Farran's Antenna Test & Measurement Frequency Extension Systems are a cost effective way to expand your test capability into the millimeter wave range.

With Farran's AET/AER antenna measurement extension solution you can:

- Extend the range of your existing equipment in the most cost effective way.
- Achieve full waveguide band coverage with sweep and step frequency capability.
- Use seamlessly with automated antenna range positioning systems.
- Interface with compatible Keysight, R&S, Copper Mountain Technologies and Anritsu vector network analyzers.
- Achieve unparallel dynamic range, stability and accuracy of the coherent phase and amplitude measurements.
- Obtain 40 – 500 GHz frequency range coverage.

“I have searched for broadband, yet lightweight, frequency extension solutions to upgrade our antenna range to millimeter waves. We wanted to ensure compatibility with our existing equipment while minimising the need to reconfigure the system when switching between coaxial and mm-wave modes. I think we found all that and much more, with Farran's AET/AER solution.”

Pierre Michel, Head of Product Management & Development, France



RADIATION PATTERN MEASUREMENTS

- Lightweight and low complexity make it an ideal solution for omni-directional spherical systems and scanners
- Does not require complex and expensive positioners



GAIN, PHASE AND POLARISATION MEASUREMENTS

- Coherent phase and amplitude measurements
- High phase and amplitude stability



NEAR-FIELD AND FAR-FIELD MEASUREMENTS

- Spherical near-field and far-field measurements.
- Ability to perform far-field measurements of low gain antennas.



Product Features and Benefits

Farran's Antenna Test & Measurement Frequency Extension Systems enable over the air radiation pattern, gain, phase and polarisation measurements of millimeter wave antennas in near-field and far-field up to 500 GHz.

The system leverages on seamless compatibility with vector network analyzers of all major equipment suppliers. The small form factor and light weight of all AET/AER extension modules allow for the use of lighter mounting structures, eliminating the need for complex and expensive positioners without compromising on accuracy of measurements.

Very high amplitude and phase stability as well as an exceptional dynamic range ensure a very high degree of measurement fidelity even for low-gain antennas, and allow for a high measurement speed and a reduced test time for each AUT. Farran's Antenna Test & Measurement Frequency Extension Systems offer unparalleled value when upgrading an existing or configuring new equipment for antenna range measurements.



SERVICES AVAILABLE

- Technical Support
- Installation and Setup
- Maintenance
- Application Support
- Hardware Support

For more information on any of our products or services please visit our website: www.farran.com



TECHNICAL SUPPORT

- Technical support provided directly by our knowledgeable and friendly engineers.
- Support for pre- and post-purchase: system configuration, installation and troubleshooting.



GLOBAL REP NETWORK

- Support queries answered by our responsive Global Rep Network in over 25 countries worldwide.



WARRANTY

- Standard 3 year warranty.
- Up to 5 year warranty optional.

System Requirements

- 4-port Keysight, R&S, Anritsu or Copper Mountain Technologies VNA with a baseband frequency coverage up to 20 GHz.
- Optional compatibility with modern and legacy 2-port VNAs.
- Calibration kits provided.
- Cables and power supplies provided.
- Custom solutions available.
- For a full check of compatibility with your equipment contact Farran Support on: www.farran.com/support

