



Millimeter Wave Vector Network Analyzer Test Solution: CobaltFx

Farran and Copper Mountain Technologies' CobaltFx is a dedicated solution for a banded millimeter wave network analysis in 18 - 110 GHz range.

The solution consists of four dedicated systems for 18-54 GHz, 50-75 GHz, 60-90 GHz and 75-110 GHz bands. Each system can be configured for 2- or 4-port operation using up to 4 transmitter-receiver mm-wave modules and a Cobalt USB form factor VNA.

This compact, scalable and cost-effective solution allows you to expand your test capability up to 110 GHz, with each frequency band that can be incorporated as needed. It allows for an easy expansion and a smaller upfront investment in both production and development environments.

With CobaltFx millimeter wave measurement solution you can:

- Expand your test capability to mm-waves in the most cost-effective way.
- Achieve full waveguide band coverage with sweep and step frequency capability.
- Use seamlessly in bench-top DUT or with MPI/Cascade on-wafer probe station measurements.
- Easily integrate into your antenna range setup.
- Achieve unparallel dynamic range, stability and accuracy of the coherent phase and amplitude measurements.
- Ensure seamless system integration.
- Obtain 18 – 110 GHz frequency range coverage.

“A single, cohesive, cost-effective solution was our criteria when searching for a mm-wave S-Parameter test set. Farran's CobaltFx system met all these requirements in spades! It covered all our technical requirements for S-Parameter measurements in W-Band, and at approximately half the price of other solutions. Cobalt-Fx has proved to be an excellent overall solution for our mm-wave requirements. Farran's service and support before, during, and after sales was exemplary.”

Technical Director, US Semiconductor Corporation



MM-WAVE S-PARAMETERS MEASUREMENTS

- Full 2-port or 4-port S-parameters millimeter wave measurements up to 110 GHz
- Error-corrected measurements – full 2/4-port TRL/SOLT calibration



MEASUREMENT APPLICATIONS

- Bench-top and on-wafer
- 5G and WiGig
- Automotive radar and sensor testing
- Materials characterisation
- Antenna performance verification
- 70 / 80 / 90 GHz backhaul radio



CONFIGURATION

- 2-port: C4209 and C4220, 2 off FET1854 or FEV-15/12/10
- 4-port: C4409 and C4420, 4 off FET1854 or FEV-15/12/10
- Windows or Linux
- PC, laptop or tablet





Product Features and Benefits

Farran and Copper Mountain Technologies' CobaltFx Vector Network Analyzer millimeter wave test & solution enables S-parameters measurements of packaged and on-wafer devices, material characterisation and antenna performance verification up to 110 GHz. The system leverages on seamless operation with Cobalt C4209/4220 and C4409/C4420 vector network analysers for 2-port and 4-port test configurations, respectively.

The CobaltFx millimeter wave network analysis solution fulfils requirements for a bench-top, on-wafer and Over-the-Air measurements in a production as well as R&D and scientific environments. Very high amplitude and phase stability as well as an exceptional dynamic range ensure a very high degree of measurement fidelity without a need for a frequent calibration. Very high sweep speed reduces the test time for each component or an antenna under test.

The CobaltFx solution offers unparalleled value when adding and expanding your test capability by millimeter wave S-parameters measurements up to 110 GHz.



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

- C4209, C4409, C4220 or C4420 Cobalt VNA.
- 1 - 4 FET1854 or FEV-15/12/10 frequency extension modules.
- Calibration kits provided.
- Cables provided.
- Windows or Linux powered PC, laptop or tablet.
- For a full check of compatibility with your equipment contact Farran Support on: www.farran.com/support

