



Understanding RF Studio Major Features

VNA Acquisition & Instrument Control

1. Single-measurement VNA data acquisition
2. Advanced geometry-based acquisition for repeatable multi-site testing
3. Copper Mountain VNA support
4. LibreVNA support
5. Signal Hound VNA support
6. TCP/IP / SCPI analyzer communication
7. VISA analyzer communication
8. Analyzer connection testing and validation
9. Persistent analyzer connection while navigating the application
10. Analyzer state/setup/calibration file loading
11. Acquisition of .s1p, .s2p, .s3p, and .s4p Touchstone files
12. Automatic acquisition of the required S-parameter set based on port count
13. Optional direct transition from acquisition into analysis after a quick measurement in base mode

Advanced Production Acquisition

14. Custom .urfgeom geometry files for reusable test sequences
15. Manual creation of measurement-site sequences
16. CSV import of measurement-site sequences
17. Guided site-by-site acquisition workflow
18. Serial-number-based DUT organization
19. Automatic Final-data folder organization
20. Resume incomplete test sequences
21. Overwrite existing production data when explicitly selected
22. Dedicated retest workflow
23. Automatic Retest 1, Retest 2, etc. folder creation
24. Selection of individual sites for retesting

Touchstone Analysis

25. Touchstone analysis for RI, MA, and DB formatted data
26. Automatic detection of port count and available S-parameters
27. LogMag plotting for any S-parameter
28. Phase plotting for any S-parameter
29. VSWR plotting for reflection S-parameters
30. Multiple S-parameters on a single figure

- 31. Multiple independently configured figure groups
- 32. Custom X- and Y-axis limits for each figure
- 33. Custom figure titles and axis labels
- 34. Automatic engineering-friendly plot scaling

Interactive Plot Inspection

- 35. Interactive mouse-wheel zoom
- 36. Box zoom
- 37. View reset
- 38. Two independently assignable measurement markers
- 39. Markers snapping to actual measured Touchstone data points
- 40. Marker frequency and amplitude/value readouts
- 41. Frequency-delta measurement between markers

Quick Analysis

- 42. Quick Analysis of plotted RF data
- 43. Automatic extrema/range analysis
- 44. Reflection-data interpretation including reflected-power context
- 45. VSWR-region analysis
- 46. Detection of useful contiguous frequency regions

Export, Traceability & Workflow

- 47. Standard PNG plot export
- 48. IEEE-style single-column PNG export
- 49. IEEE-style double-column PNG export
- 50. Export of plots including markers, legends, zoom state, and frequency-delta information
- 51. Automatic file metadata for measurement traceability
- 52. Integrated acquisition activity logging
- 53. Built-in acquisition and analysis help/documentation