



PicoVNA® 5 Software

Available on Windows®, macOS® and Linux®.

SUPPORTS ALL PICO TECHNOLOGY VECTOR NETWORK ANALYZERS AND IS AVAILABLE TO DOWNLOAD WITH FREE SOFTWARE UPDATES AND LIFETIME SUPPORT*.



The PicoVNA Range



PicoVNA Series
Low-cost, professional-grade benchtop 6 GHz and 8.5 GHz VNAs



PicoVNA-R
Portable 6.5 GHz VNA reflectometer supporting S11 and S21 measurements



PicoVNA E-Cal Kit
Automated highly repeatable VNA SOLT calibrations up to 8.5 GHz, SMA (M) and (F)



Premium 8.5 GHz SOLT Calibration Kit
High-performance calibration standards, available in PC3.5 (M) and (F) connectors



Insertable Check Standards SMA (M) & (F)
Validate the accuracy of an RF network post-calibration using a short mismatched line (75mm of 25Ω)



Network Metrology Training Kit
Designed to support learning and experience of RF measurements in the sub-6 GHz range

DEFINE MEASUREMENT:

Click here to configure the measurement for each plot window using these settings:

Measurement Parameter: choose the S-parameter (S11, S21, S12, S22)

Plot Domain: select either the frequency or time domain

Plot Type: choose from Log Magnitude, Phase, Group Delay, Linear Magnitude, Real, Imaginary, VSWR, Polar Linear, or Smith Chart

Reference Position: select either Top, Centre, or Bottom.

ADJUST HORIZONTAL AXIS:

Click on the upper or lower limits of the horizontal axis on any plot to adjust the range. Values can be typed in directly, or adjusted via a context-sensitive popup – opened by clicking into the input – using touch-friendly controls or mouse-wheel scroll.

REFERENCE POSITION:

Click and drag this arrow on each plot to set the reference position.

WORKSPACES:

Add and define multiple workspaces, each with their own settings, spans, views, measurements and calibrations.

MEASUREMENT START/STOP CONTROL:

Click to start displaying measurements and click again to stop. The keyboard spacebar also has the same function.

VERTICAL AXIS SETTINGS:

The scaling and reference level can be adjusted using the inputs shown at the top of each plot. Values can be typed in directly, or adjusted via a context-sensitive popup – opened by clicking into the input – using touch-friendly controls or mouse-wheel scroll.

MEASUREMENT CHANNELS:

Select the measurement channels to display on a plot by clicking on each channel to toggle it on/off.

MARKER SIDEBAR:

View all markers across all plots in the workspace. Click or double-click to hide/unhide a marker readout.

MARKER GROUPS:

Used to compare measurements at different frequencies (or times) across different channels and S-parameters. One marker must first be converted to a reference; other markers are then added to the group to show delta readouts.

MARKERS:

Individual markers can be added to a plot by CTRL + Click and then adjusted using the settings in the Marker sidebar.

MARKER READOUT:

Each marker has a readout visible in the marker sidebar. These can be configured using the marker panel to adjust the marker position and parameters shown.

TIME DOMAIN:

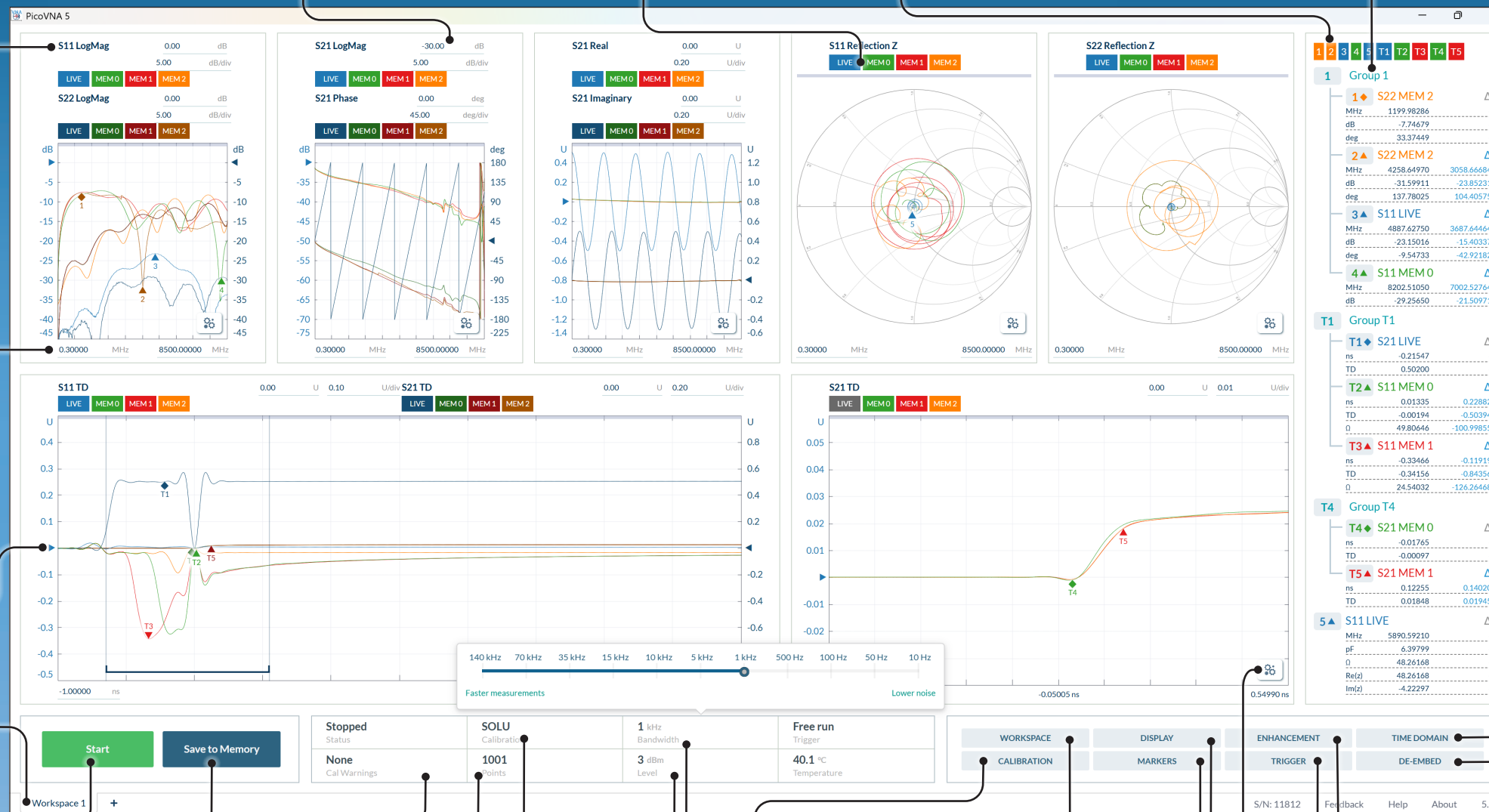
Adjust the settings for a time-domain measurement which has been processed using an inverse FFT from the frequency sweep. Choose lowpass (best resolution) or bandpass mode, and configure windowing, DC termination, and the time/distance axis.

DE-EMBED:

Shift the reference plane using the de-embed sidebar – or load Touchstone files to remove the effects of a network section on ports 1 and 2.

HELP & INFO BAR:

This menu section provides VNA and software version details, a link to the user manual, and space to give feedback or report an issue.



SAVE TO MEMORY:

Click to add the current live measurement trace to the memory. PicoVNA 5 supports an unlimited number of memory traces.

POINT COUNT:

Click here to set the number of measurement points on a sliding-scale popup, in increments.

CALIBRATION:

Check the settings for the loaded calibration. There are further options to load the factory calibration or run a new calibration.

CALIBRATION MENU:

Start a new S11, S11+S21, or full 2-port calibration using SOLT, TRL/ TRM, E-Cal, or custom standards. Define multiple calibration kits, or load a previous calibration.

WORKSPACE:

Click here to load or save a workspace session, or to import/export measurement data within the current workspace.

TRIGGER:

Sets the VNA's trigger mode – free run (default), rising edge, falling edge, or manual. Both rising and falling edge require an external trigger.

ENHANCEMENT:

Enhance measurements with smoothing, averaging, extra synthesiser settling time, or a configurable group delay aperture.

CAL WARNINGS:

Checks that your measurement settings still match the loaded calibration.

POWER LEVEL:

Click here to set the signal power level on a sliding-scale popup, in increments. Best practice is to measure a DUT at the same power level that the calibration was carried out.

RECEIVER BANDWIDTH:

Click here to set the receiver bandwidth on a sliding-scale popup, in increments.

MARKERS:

Click here to open the marker sidebar, add a new marker or adjust the settings for each marker.

DISPLAY:

The layout of plots in a workspace can be updated using this sidebar. Choose from standard layouts or create a custom layout for your use case.

PLOT FORMATTING:

Click here to format the plot to add a second axis, move it to a new window, maximise to full screen, or magnify a region to open it in a new plot window.

TOUCHSCREEN FRIENDLY:

Easily interact with the software using a touchscreen or mouse.



Download the
PicoVNA 5 Software

MM162-1 Copyright © 2026 Pico Technology Ltd. All rights reserved.
* Upgrades may be required for some VNA models