R&S®ZNLE VERSUS ANRITSU SHOCKLINE™ MS46322B

Comparison of vector network analyzers

Ideal for basic network analysis

The R&S®ZNLE vector network analyzer (VNA) has many features that compete with the Anritsu ShockLine™ MS46322B. The R&S®ZNLE has better RF performance with more than enough speed, dynamic range and output power to measure passive RF components. Taking just 4.6 µs per point for each measurement, the R&S®ZNLE is much faster than the MS46322B. This speed is especially critical in a production environment where configuring and viewing results are vital. The R&S®ZNLE has a small form factor and comes with an integrated touch display.

All settings and measurement results are displayed immediately and can be viewed at a glance without connecting any additional accessories. The time domain analysis option (R&S®ZNL-K2) and distance-to-fault measurement option (R&S®ZNL-K3) give the R&S®ZNLE essential features for general purpose testing.

Your benefit	Features of the R&S®ZNLE
Solid performance in an economical instrument	▶ Excellent measurement speed of 4.6 µs (bandwidth: 500 kHz) ▶ Low trace noise of 0.01° RMS (typ.)
Clearly structured user interface and operable via touchscreen	▶ Wide capacitive touchscreen for convenient configuration and operation ▶ Undo/redo softkeys and fully integrated context-sensitive help menu for user-friendly operation
Ideal for basic VNA applications in the lab and production	▶ Embedding/deembedding, fixture compensation, support for automatic calibration units and remote control via LAN or GPIB

	R&S®ZNLE	Anritsu ShockLine™ MS46322B
Frequency range		
Minimum	100 kHz (with -B100 option)/1 MHz	1 MHz
Maximum	3/4.5/6/14/18 GHz, 20 GHz overrange	8/20/43.5 GHz
Measurement time	4.6 µs (bandwidth: 500 kHz)	140 µs (bandwidth: 300 kHz)
Measurement bandwidth	1 Hz to 500 kHz	10 Hz to 300 kHz
Trace noise (typ., RMS)	0.01° (100 kHz to 10 GHz), 0.02° (10 GHz to 20 GHz), 0.001 dB (100 kHz to 10 GHz), 0.0025 dB (10 GHz to 20 GHz)	< 0.05° (20 MHz to 20 GHz), 0.001 dB (20 MHz to 20 GHz)
Number of points	max. 5001 points	max. 16001 points
Number of ports	2	2
Dynamic range	110 dB (typ.), 120 dB (50 MHz to 16 GHz)	122 dB (typ.), 100 dB (10 MHz to 8 GHz)
Source power	–10 dBm to +2 dBm (typ.)	–20 to +5 dBm (typ., 1 GHz to 8 GHz), –20 to –3 dBm (> 8 GHz to 43.5 GHz)
Integrated display	yes	no
Warm-up time	30 min	45 min
Dimensions (W × H × D)	408 mm × 186 mm × 235 mm	484 mm × 108 mm × 590 mm
Weight	6 kg	< 11 kg

R&S®ZNLE is ...

Easy to configure

- Basic VNA functions without adding options
- S-parameter measurement wizard

Easy to calibrate

- Calibration setting menu
- Supports manual calibration kits and automatic calibration units
- Supports third-party calibration kits

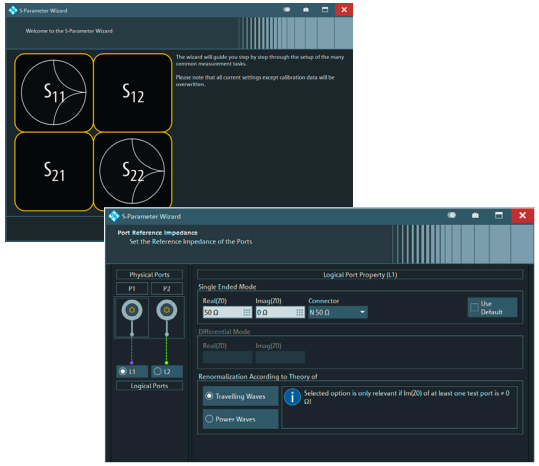
Easy to use

- Touch display
- Clearly structured user interface
- Undo/redo softkey
- Context-sensitive help menu

For options, prices and more information, visit
www.rohde-schwarz.com/product/ZNLE

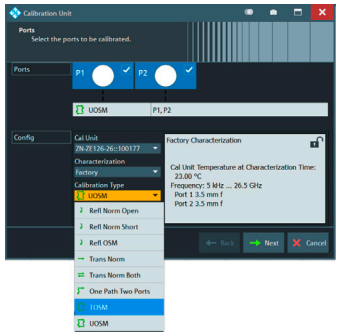
Easy to configure

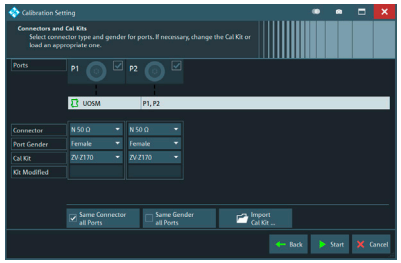
The wizard for S-parameters ensures convenient and hassle-free setup and includes a context-sensitive help menu that can be accessed at the touch of a button.



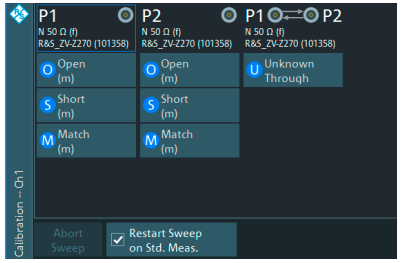
Easy to calibrate

The calibration wizard provides an overview of possible calibration methods for easy selection.





Easy-to-follow dialogs collect groups of related settings for highly organized selection, entries and/or follow-up measurements.

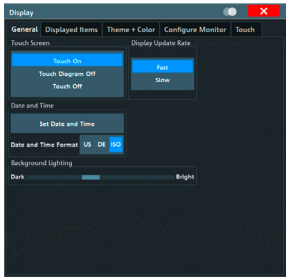


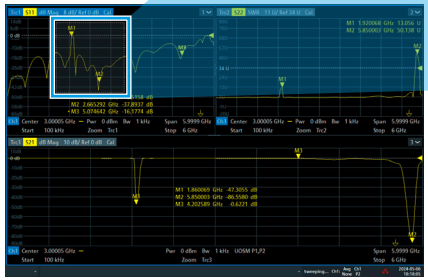
Competitive summary

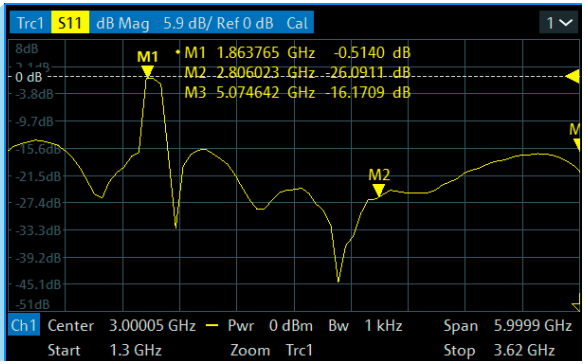
- Ideal for basic VNA applications
- Small and compact
- Excellent measurement speed
- Easy to configure, easy to calibrate and easy to use
- Easy extension with software keycodes for time domain analysis option (R&S®ZNL-K2) and distance-to-fault measurement option (R&S®ZNL-K3)
- Excellent price-performance ratio

Easy to use

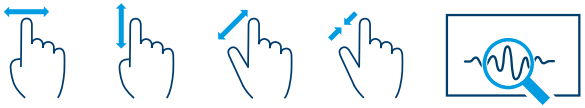
The R&S®ZNLE comes with a touch display that can be operated with simple hand gestures. Touch operations include double tapping to maximize a window and dragging to pan a display area that is out of view. Users can thus interact quickly with the interface to obtain an optimized view.





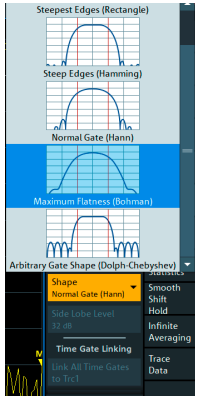


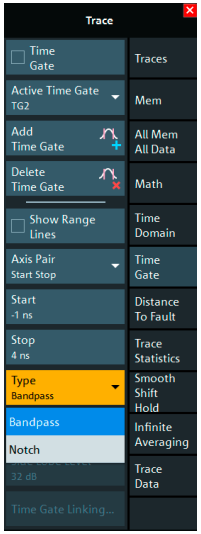
The zoomed-in view obtained by tapping and dragging (multiple zoom feature) increases the size of the displayed area for more details.



Easy to upgrade

The R&S®ZNL-K2 option can be used to select window filter functions to optimize the time domain response and suppress side lobes. R&S®ZNL-K2 can help eliminate unwanted responses with a time gate and transform the gated result back into the frequency domain to improve the spectral resolution and reveal more details for further analysis during design optimization. The option can be installed in just a few keystrokes.





Modern and intuitive user interface with "Undo" function

The R&S®ZNLE provides quick, convenient and direct access to commonly used functions such as Screenshot and Undo without having to navigate through menus. Save/Open virtual keys are also available on the side panel.

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R&S®ZNLE versus Anritsu ShockLine™ MS46322B
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