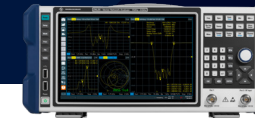


R&S®ZNLE VERSUS KEYSIGHT E5063A ENA

Comparison of vector network analyzers



An ideal choice for basic network analysis

The R&S®ZNLE vector network analyzer (VNA) is a two-port device that can be used for bidirectional measurements of S-parameters S_{11} , S_{21} , S_{12} and S_{22} in passive components. The R&S®ZNLE uses Windows 10 as its operating system and incorporates modern features such as touch capability and an intuitive user interface. The time domain analysis option (R&S®ZNL-K2) and distance-to-fault measurements option (R&S®ZNL-K3) give the R&S®ZNLE essential features for general purpose testing. The RF performance of the R&S®ZNLE addresses most market and application requirements for measuring passive RF components. Compared to the E5063A ENA, the R&S®ZNLE has faster measurement speeds, is more compact in size and weight, and offers a very competitive price.

Your benefit	Features of the R&S®ZNLE
Solid performance in an economical instrument	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ Embedding/deembedding, fixture compensation, support for automatic calibration units and remote control via LAN or GPIB

	R&S®ZNLE	Keysight E5063A ENA
Frequency range		
Minimum	100 kHz (with -B100 option)/1 MHz	100 kHz to 500 MHz
Maximum	3/4.5/6/14/18 GHz, 20 GHz overrange	1.5/3/4.5/6.5/8.5/14/18 GHz
Measurement time	4.6 μ s (bandwidth: 500 kHz)	45 μ s (typ., bandwidth: 300 kHz)
Measurement bandwidth	1 Hz to 500 kHz	10 Hz to 300 kHz
Trace noise (typ., RMS, IFBW = 10 kHz)	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)	0.002 dB (8 MHz to 4.35 GHz, IFBW = 70 kHz)
Number of points	max. 5001 points	max. 10001 points
Number of ports	2	2
Dynamic range	110 dB (typ.), 120 dB (50 MHz to 16 GHz)	122 dB (typ.), 117 dB (100 MHz to 4.34 GHz)
Source power	-10 dBm to +2 dBm (typ.)	-20 to +5 dBm (typ.)
Warm-up time	30 min	90 min
Dimensions (W x H x D)	408 mm x 186 mm x 235 mm	432 mm x 235 mm x 310 mm
Weight	6 kg	11.8 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

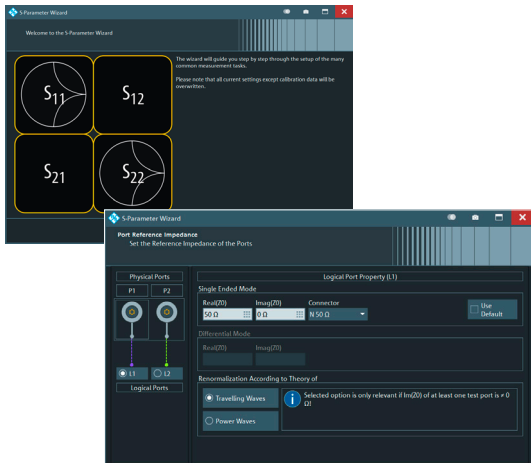


For options, prices and more information, visit www.rohde-schwarz.com/product/ZNLE



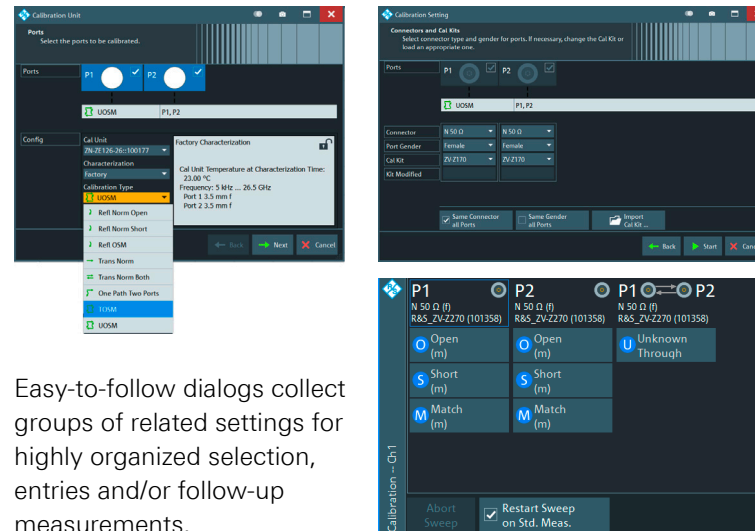
Easy to configure

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.

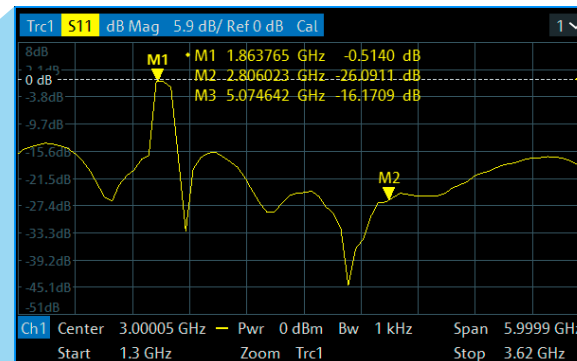
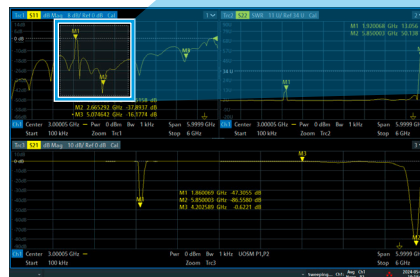
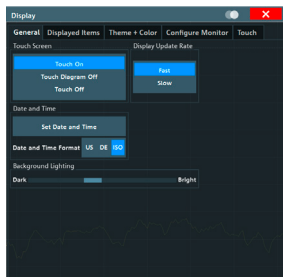


Easy-to-follow dialogs collect groups of related settings for highly organized selection, entries and/or follow-up measurements.



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.



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 upgrade



The R&S®ZNL-K3 option lets the analyzer automatically determine a suitable number of sweep points for a given maximum distance to fault. It is also possible

to determine which peaks should be defined as faults. The peak values can be exported as a list (e.g. CSV file) for reporting. The option can be installed with only 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.



Rohde & Schwarz GmbH & Co. KG

www.rohde-schwarz.com | www.rohde-schwarz.com/support | www.training.rohde-schwarz.com
 R&S® is a registered trademark of Rohde & Schwarz | Trade names are trademarks of the owners
 R&S®ZNLE versus Keysight E5063A ENA
 PD 3673.0140.32 | Version 01.00 | July 2024 (ch)
 Data without tolerance limits is not binding | Subject to change
 © 2024 Rohde & Schwarz | 81671 Munich, Germany