ROHDE&SCHWARZ
Make ideas real

R&S®ZNL VECTOR NETWORK ANALYZER
The 3-in-1 allrounder

The perfect choice for

General RF lab measurements	IoT and Wireless manufacturing and troubleshooting
Education and training	**Service and maintenance**

Key specifications

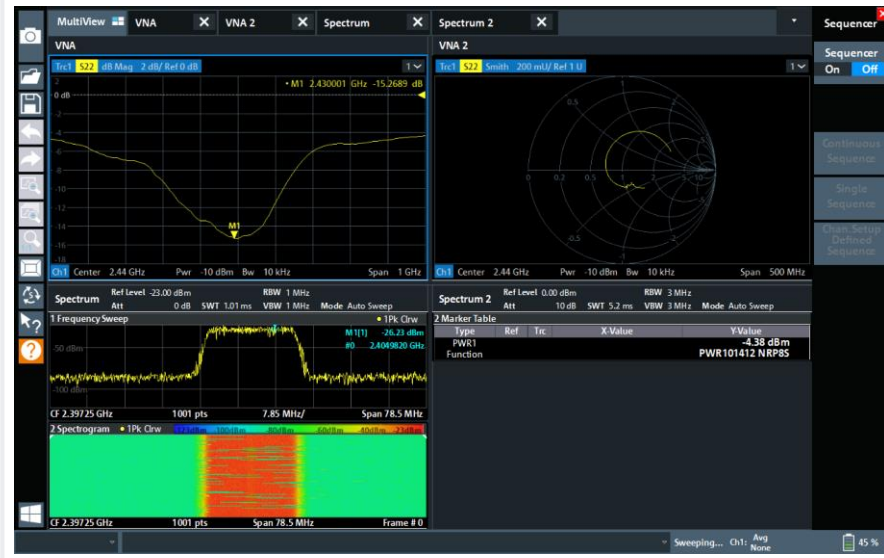| Key specifications	
Frequency range	5 kHz to ▶ 3 GHz (R&S®ZNL3) ▶ 4.5 GHz (R&S®ZNL4) ▶ 6 GHz (R&S®ZNL6) ▶ 14 GHz (R&S®ZNL14) ▶ 20 GHz (R&S®ZNL20)
Number of ports	two ports, N (F), two ports, 3.5mm (m) [1]
Dynamic range	up to 120 dB (spec.), 130 dB (typ.)
Output power	−40 dBm to 0 dBm (spec.)
IF bandwidths	1 Hz to 500 kHz
Sweep time	16.7 ms for 401 points (100 kHz IFBW, TOSM, 200 MHz span)
Spectrum analyzer	hardware option [2]

[1] For R&S®ZNL20
[2] Available for R&S®ZNL3, R&S®ZNL4 and R&S®ZNL6

One device for all your measurements

Measurement equipment for RF applications must fulfill high quality standards. Instruments should be easy to use and offer high versatility. Fast measurements and reliable performance are crucial.
With the R&S®ZNL, Rohde & Schwarz exceeds these expectations and offers even more:
Vector network analysis, spectrum analysis and **power meter** measurements are unified in one single, compact instrument, making the R&S®ZNL a universal all-rounder.

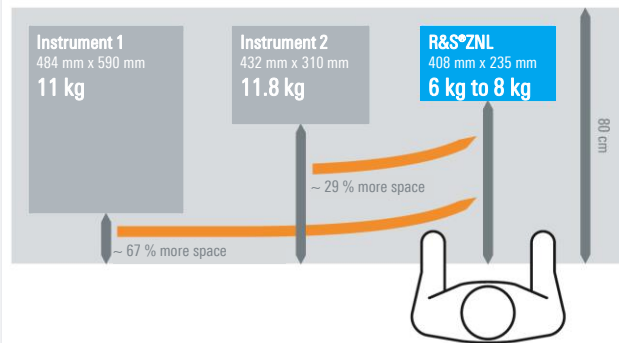| Your benefit	Features
3 instruments in 1, and an independent CW signal generator on top	A full two-port VNA that supports true spectrum analyzer hardware (R&S®ZNLx-B1) and also supports the use of power sensors (optional), turning it into a power meter. R&S®ZNL equipped with R&S®ZNLx-B1 option can also benefit from option R&S®ZNL-K14, which allows the stimulation of a DUT by an independent continuous wave generator for analysis in the frequency spectrum domain
Widest frequency range in the market	The R&S®ZNL is unrivaled when it comes to its frequency operation range. The start frequency at 5 kHz is the lowest in the market for VNAs that can range up to 20 GHz.
Fully portable	The R&S®ZNL is very lightweight (6 kg to 8 kg) and very compact (408 mm x 235 mm footprint) and has a top handle for easy carrying. The battery pack allows it to be used on the go.
Clearly structured user interface with multitouch	Wide capacitive touchscreen for convenient configuration with multitouch gesturing. Undo/redo softkeys and fully integrated context-sensitive help menu for user-friendly operation.
Compatible with R&S®VSE	The R&S®ZNL is fully compatible with R&S®VSE and selected R&S®VSE options for in-depth analysis of the device under test.

For more information, visit
www.rohde-schwarz.com/product/ZNL

MultiView

MultiView provides a convenient overview of all active R&S®ZNL modes. Here you see the combination of spectrum analyzer and network analyzer. In this view, all modes can be updated sequentially.

Compact, lightweight instrument

Instrument 1
484 mm x 590 mm
11 kg

Instrument 2
432 mm x 310 mm
11.8 kg

R&S®ZNL
408 mm x 235 mm
6 kg to 8 kg

~ 29 % more space

~ 67 % more space

80 cm

The R&S®ZNL saves up to 67 % of desk space, leaving plenty of room for the measurement setup.

Portable for use on the go

With batteries, the R&S®ZNL can be used outside the labs. Batteries are hot-swappable.

A padded soft carrying bag for safe transportation of the R&S®ZNL.

Ordering information

Description	Item
Vector network analyzer, 5 kHz to 3 GHz	R&S®ZNL3
Vector network analyzer, 5 kHz to 4.5 GHz	R&S®ZNL4
Vector network analyzer, 5 kHz to 6 GHz	R&S®ZNL6
Vector network analyzer, 5 kHz to 14 GHz	R&S®ZNL14
Vector network analyzer, 5 kHz to 20 GHz	R&S®ZNL20
Spectrum analysis [1]	R&S®ZNLx-B1
Time domain measurement	R&S®ZNL-K2
Distance-to-fault measurements	R&S®ZNL-K3
Independent CW source [1] [2]	R&S®ZNL-K14
AM/FM/φM analog modulation analysis	R&S®FPL1-K7
R&S®NRP power sensor measurement	R&S®FPL1-K9

R&S®VSE signal explorer software plus selected options- Please contact your local Rohde & Schwarz sales office.

[1] Available for the R&S®ZNL3, R&S®ZNL4 and R&S®ZNL6,
[2] Requires the R&S®ZNLx-B1 hardware option

Scan to view the full list of options and more information in the R&S®ZNL brochure

Feature highlights

► Widest frequency range from 5 kHz up to 20 GHz
► 3 instruments in 1: vector network analyzer, spectrum analyzer and power meter
► Optional independent CW signal generator for use with spectrum analysis
► Two-port vector network analyzer for bidirectional measurements
► MultiView operation
► Wide dynamic range of up to 130 dB (typ.)
► Output power: from –40 dBm up to 3 dBm (typ.)
► Fast measurements, e.g. 16.7 ms at 100 kHz IFBW (401 points, 200 MHz span, two-port calibration)
► Compact size and low weight (6 kg to 8 kg)
► Optional battery pack