ROHDE&SCHWARZ
Make ideas real

R&S®ZNH FULL 2-PORT HANDHELD VECTOR NETWORK ANALYZER

The perfect choice for

Field Testing	R & D
Education	Manufacturing

Key specifications	
Frequency range	30 kHz to 4/8/18/26.5 GHz
No. of ports	2
Basic functions	DTF, one-port cable loss, VSWR, return loss, S_{11}, S_{21}, S_{12}, S_{22} (magnitude & phase)
Dynamic range	Up to 100 dB (typ.)
Max. port output power	Up to 0 dBm (meas.) (300 kHz $\leq$ f $\leq$ 24 GHz)
Trace Noise	Magnitude (RMS) : 0.0015 − 0.0040 dB (typ.) Phase (RMS) : 0.015° − 0.025° (typ.)
Measurement points	16,001

Light in weight. Heavy in performance
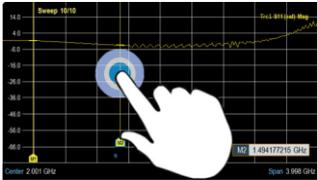
► Small form factor and portable; weighs only 3.1 kg
► Good dynamic range
► Excellent maximum port output power
► Low trace noise
► Highest number of measurement points supported in this class

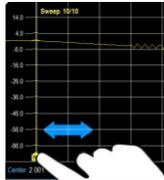| Your benefit	Features
Additional protection from overloading without an external attenuator	► Built-in receiver step attenuator with attenuation from 0 dB to 15 dB in 5 dB steps
Directly calibrate DUTs with different input/output connectors	► Using UOSM calibration
Simple to operate	► Touchscreen allows intuitive operation using smartphone-like touch gestures ► Adjustable display brightness and backlit keypad for operation in bright sunlight or dim environments ► Wizard function automates test sequences so that recurring measurements can be performed quickly and easily without mistakes ► Battery operated with a battery life or four hours when fully charged
Simple to configure	► Configurable dashboard with configuration overview menu for quick measurement setup and 70% less taps ► Flexible calibration approach ► Numerous calibration standards and calibration kits are supported. Calibration kit information can be easily entered manually with R&S®InstrumentView software
Simple to add value	► Many functions are included as standard, such as one-port cable and antenna analysis and full S-parameters measurement ► Buy only what you need – options can be ordered independently and without prerequisites ► Four-receiver architecture

海洋儀器
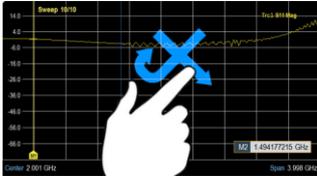致力于电子测试、维护领域!

Simple to operate

Intuitive operation using smartphone-like touch gestures

Add a marker by double-tapping

Move a marker by dragging the marker label
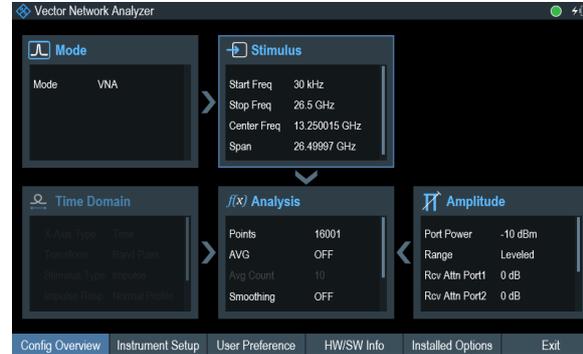
Delete a marker by crossing it out

Preconfigure in three simple steps
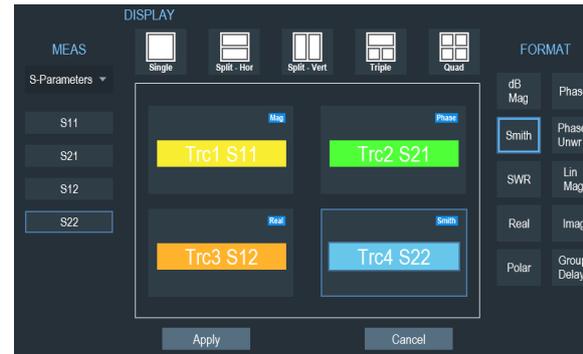### Eliminate measurement errors due to wrong inputs

1 Project manager/expert creates the test sequences

2 Operator uses the wizard to execute the test sequences

3 Operator shows the measurement result to the project manager/expert for documentation

Refl Norm Open	Refl Norm Short	Refl OSM	Trans Norm P1
Trans Norm P2	Trans Norm Both	TOSM	UOSM

Simple to configure

Configurable dashboard for fast parameter setting

Vector Network Analyzer

Mode
Mode   VNA

Stimulus
Start Freq   30 kHz
Stop Freq   26.5 GHz
Center Freq   13.250015 GHz
Span   26.49997 GHz

Time Domain
X-Axis Type   Time
Transform   Band Pass
Stimulus Type   Impulse
Impulse Resp   Normal Profile

f(x) Analysis
Points   16001
AVG   OFF
Avg Count   10
Smoothing   OFF

Amplitude
Port Power   -10 dBm
Range   Leveled
Rcv Attn Port1   0 dB
Rcv Attn Port2   0 dB

Config Overview | Instrument Setup | User Preference | HW/SW Info | Installed Options | Exit

Just a few taps to configure the measurement display and format

DISPLAY

MEAS
S-Parameters

Single | Split - Hor | Split - Vert | Triple | Quad

FORMAT

S11
S21
S12
S22

Trc1 S11 (Mag) | Trc2 S21 (Phase)
Trc3 S12 (Real) | Trc4 S22 (Smith)

dB Mag | Phase
Smith | Phase Unwr
SWR | Lin Mag
Real | Imag
Polar | Group Delay

Apply   Cancel

Feature highlights

► Unknown through calibration (UOSM) is possible
► Various calibration kits are supported
► Calibration kit information can be entered manually with R&S®InstrumentView software

Popular accessories

Description	Item
Calibration kit, type-N (m), 50 Ω (0 Hz to 18 GHz)	R&S®ZN-Z170
Calibration kit, type-N (f), 50 Ω (0 Hz to 18 GHz)	R&S®ZN-Z170
Calibration kit, 3.5 mm (m), 50 Ω (0 Hz to 26.5 GHz)	R&S®ZN-Z135
Calibration kit, 3.5 mm (f), 50 Ω (0 Hz to 26.5 GHz)	R&S®ZN-Z135
Calibration unit, (2 MHz to 4 GHz)	R&S®ZN-Z103
Calibration unit, (1 MHz to 6 GHz)	R&S®ZN-Z103
Soft carrying bag	R&S®HA-Z220
Carrying holster	R&S®HA-Z322