Aumictech
Test & measurement · bought, sold, repaired, calibrated

Data Sheet
August 13, 2026

ROHDE & SCHWARZ

Rohde & Schwarz ZVL3-75 Vector Network Analyzer

Rohde & Schwarz ZVL3-75 Vector Network Analyzer 9 kHz to 3 GHz 75 ohm The R&S ZVL3-75 is the 75 ohm member of the compact ZVL vector network analyzer family, specified from 9 kHz to 3 GHz for TV and CATV work. Order number 1303.6509.75 (also listed as 1303.6509K75). It isabidirectional two-port instrument that displays all four S-parameters. Dynamic range at 10 Hz IF bandwidth is greater than 110 dB, typically 120 dB, from 20 MHz to 3 GHz on the 75 ohm model. Optional spectrum analysis, OCXO, and NRP-Z power-sensor support share the FSL option set. The R&S ZVL3-75 is the 75 ohm member of the compact ZVL vector network analyzer family, specified from 9 kHz to 3 GHz for TV and CATV work. Order number 1303.6509.75 (also listed as 1303.6509K75). It isabidirectional two-port instrument that displays all four S-parameters. Dynamic range at 10 Hz IF bandwidth is greater than 110 dB, typically 120 dB, from 20 MHz to 3 GHz on the 75 ohm model. Optional spectrum analysis, OCXO, and NRP-Z power-sensor support share the FSL option set.

MODEL Rohde & Schwarz ZVL3-75	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU ZVL3-75	LISTING https://aumictechlabs.com/products/zvl3-75-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Rohde & Schwarz ZVL3-75 is a 75 Ohm vector network analyzer engineered for RF component characterization, TV/CATV system analysis, and general network measurement.

Operating from 9 kHz to 3 GHz, this portable instrument integrates network analysis, spectrum analysis, and power measurement into a single platform, delivering dynamic range exceeding 115 dB (typical 123 dB) with measurement bandwidths up to 500 kHz for fast, accurate testing in development, production, and field service environments.Technical Specifications Frequency Range: 9 kHz to 3 GHz Impedance: 75 Ohms Dynamic Range: >115 dB (typical 123 dB) Measurement Bandwidth: Up to 500 kHz Physical: Compact form factor, 37 cm depth, less than 7 kg. Battery operation available. Connectors: 75 Ohm ports with exchangeable inner conductors; DVI-D for external monitor; USB for R&S NRP-Z power sensor; BNC connectors for GATE IN and EXT REF (10 MHz).Key Features Complete S-parameter measurements with full system error correction via two-port bidirectional analysis Passive component characterization: impedance of filters, cables, and transmission line structures Active device measurements: amplifier and antenna matching assessment Time domain analysis and distance-to-fault (TDR) capability for cable fault detection Wide measurement bandwidth with fast synthesizers ensures high measurement throughput without sacrificing accuracy Multitrace display accommodates up to 100 simultaneous traces and diagrams Intuitive operator interface: front-panel keys, mouse/keyboard control, context-sensitive wizards, and undo/redo for up to six stepsOptional Measurement Expansion Spectrum Analysis (R&S ZVL-K1 option): Channel power, adjacent channel power, occupied bandwidth, CCDF measurement, and 20 MHz I/Q demodulation bandwidth. Spectrogram capability with R&S FSL-K14 option. Power Measurement: Integration with external R&S NRP-Z power sensor series converts the instrument into a three-in-one network analyzer, spectrum analyzer, and power meter.Typical Applications Cable and filter characterization Antenna tuning and matching verification TV and CATV distribution system analysis Component development and production test Field service diagnostics

Features & description

From manufacturer datasheet

Features

• True 75 ohm N-female test set (not a 50 ohm ZVL3 plus pads) • Bidirectional test set; all four S-parameters • 2 to 4001 points; IF bandwidths 10 Hz to 500 kHz in 1/2/5 steps • Weight less than 7 kg; 12 V DC and internal battery class • Optional FSL-B4 OCXO; USB NRP-Z power sensors; DVI-D monitor

Applications

• 75 ohm TV, CATV, and broadcast component characterization • Cable and filter S-parameter measurements in 75 ohm systems • Distance-to-fault and time-domain cable work • Portable / 12 V / battery field use (family) • Combined network and optional spectrum analysis

ZVL3 Characteristics / Specifications

PARAMETER	VALUE
Model	ZVL3-75
Manufacturer	Rohde & Schwarz
Instrument Type	Compact 75 ohm vector network analyzer
Alias	ZVL 3-75; ZVL3 75; R&S ZVL3-75
Order Number	1303.6509.75
Frequency Range	9 kHz to 3 GHz
Frequency Overrange Unspecified	5 kHz class (ZVL family)
Frequency Resolution	1 Hz
System Impedance	75 ohm
Test Port Connector	N female
Number of Test Ports	2
Measurement Points Default	201
Measurement Points Range	2 to 4001
Measurement Bandwidths	10 Hz to 500 kHz, 1/2/5 steps
Dynamic Range 9 kHz to 1 MHz	greater than 75 dB, typ. 85 dB
Dynamic Range 1 MHz to 7 MHz	greater than 85 dB, typ. 100 dB
Dynamic Range 7 MHz to 20 MHz	greater than 105 dB, typ. 120 dB
Dynamic Range 20 MHz to 3 GHz	greater than 110 dB, typ. 120 dB (ZVL3-75 only)
Power Range	minus 50 dBm to 0 dBm, typ. minus 60 dBm to +10 dBm
Power Accuracy at minus 10 dBm	less than 2.2 dB above 10 MHz
Power Accuracy 18 C to 28 C	less than 1.2 dB, typ. 0.5 dB
Source Match 9 kHz to 3 GHz	typ. greater than 14 dB
Reference Aging Internal	1e-6 per year
Reference Temperature Drift	1e-6 from 0 C to +50 C
OCXO Option FSL B4 Aging	1e-7 per year

PARAMETER	VALUE
Weight without Battery	less than 7 kg
Display Family	color LCD with Windows XP class OS
Bandwidth	is greater than 110 dB, typically 120 dB, from 20 MHz to 3 GHz on the 75 ohm model. Optional spectrum analysis, OCXO, and NRP-Z power-sensor support share the FSL option set.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

PARAMETER	VALUE
Model	ZVL3-75
Manufacturer	Rohde & Schwarz
Instrument Type	Compact 75 ohm vector network analyzer
Alias	ZVL 3-75; ZVL3 75; R&S ZVL3-75
Order Number	1303.6509.75
Frequency Range	9 kHz to 3 GHz
Frequency Overrange Unspecified	5 kHz class (ZVL family)
Frequency Resolution	1 Hz
System Impedance	75 ohm
Test Port Connector	N female
Number of Test Ports	2
Measurement Points Default	201
Measurement Points Range	2 to 4001
Measurement Bandwidths	10 Hz to 500 kHz, 1/2/5 steps
Dynamic Range 9 kHz to 1 MHz	greater than 75 dB, typ. 85 dB
Dynamic Range 1 MHz to 7 MHz	greater than 85 dB, typ. 100 dB
Dynamic Range 7 MHz to 20 MHz	greater than 105 dB, typ. 120 dB
Dynamic Range 20 MHz to 3 GHz	greater than 110 dB, typ. 120 dB (ZVL3-75 only)
Power Range	minus 50 dBm to 0 dBm, typ. minus 60 dBm to +10 dBm
Power Accuracy at minus 10 dBm	less than 2.2 dB above 10 MHz
Power Accuracy 18 C to 28 C	less than 1.2 dB, typ. 0.5 dB
Source Match 9 kHz to 3 GHz	typ. greater than 14 dB
Reference Aging Internal	1e-6 per year
Reference Temperature Drift	1e-6 from 0 C to +50 C
OCXO Option FSL B4 Aging	1e-7 per year
Weight without Battery	less than 7 kg

PARAMETER	VALUE
Display Family	color LCD with Windows XP class OS

Optional Spectrum Analyzer: ZVL-K1 (confirm license)

Notes
Specs from the R&S ZVL Vector Network Analyzer data sheet. This file is the 75 ohm ZVL3-75, not the 50 ohm ZVL3. Dynamic range from 20 MHz to 3 GHz is the 75 ohm row (greater than 110 dB, typ. 120 dB), not the 50 ohm greater than 115 dB row.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: **sales@aumictech.com** · +1 (484) 841-9341

Aumictech
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
https://aumictechlabs.com

NIST-traceable calibration · SAM registered · 30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026