


Aumictech

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ROHDE & SCHWARZ

Rohde and Schwarz ZPV Vintage Vector Analyzer

Rohde & Schwarz ZPV Vector Analyzer / Vector Voltmeter 10 Hz to 2 GHz The R&S ZPV is a modular vector analyzer (vector voltmeter) for control-engineering, crystal, antenna, amplifier, and filter measurements. The basic unit is a two-channel vector voltmeter that measures voltage amplitude and phase, plus a microprocessor analyzer that normalizes and converts the vectors into the required complex quantities. IF processing is at 20 kHz. Plug-in tuners set the RF coverage: ZPV-E1 (10 Hz to 50 MHz or 100 kHz to 1 GHz class), ZPV-E2 sampling probes, and ZPV-E3 N 50 ohm inputs from 300 kHz to 2 GHz. Total family span is 10 Hz to 2 GHz. The R&S ZPV is a modular vector analyzer (vector voltmeter) for control-engineering, crystal, antenna, amplifier, and filter measurements. The basic unit is a two-channel vector voltmeter that measures voltage amplitude and phase, plus a microprocessor analyzer that normalizes and converts the vectors into the required complex quantities. IF processing is at 20 kHz. Plug-in tuners set the RF coverage: ZPV-E1 (10 Hz to 50 MHz or 100 kHz to 1 GHz class), ZPV-E2 sampling probes, and ZPV-E3 N 50 ohm inputs from 300 kHz to 2 GHz. Total family span is 10 Hz to 2 GHz.



MODEL

Rohde & Schwarz ZPV

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

ZPV

LISTING

<https://aumictechlabs.com/products/zpv-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Rohde & Schwarz ZPV is a modular vector voltmeter and network analyzer for precision measurement of AC voltages, phase relationships, and two-port parameters across multiple

frequency bands. The base unit performs vector measurements, impedance analysis, S-parameter characterization, group delay calculation, and reflection coefficient indication. Interchangeable tuner modules extend capability from 10 Hz to 2.5 GHz, enabling application across control engineering, crystal and filter testing, antenna characterization, and amplifier validation. The system features dual numeric displays with trend bargraph, polar and Cartesian output formats, and both linear and logarithmic measurement units. HP-IB (IEEE-488) control and multiple analog recorder outputs support automated and swept measurement workflows.

Technical Specifications

Base Unit Measurement Capabilities

Voltages and voltage ratios of two AC inputs Phase relationships and vector measurements Two-port S-parameter, Y-parameter, and Z-parameter analysis Group delay Impedance and admittance Reflection coefficient and VSWR indication Transmission measurements Harmonic and spurious frequency detection (with E1 tuner and generator) Signal Processing & Control IF signal processing: 20 kHz Internal processor: Intel 8080 with 1 kByte RAM Control interface: HP-IB (IEEE-488) Display & Output Dual numeric display fields: four digits plus three alphanumeric characters (5×7 matrix) per field Trend bargraph indicator Polar (voltage/ratio and phase) or Cartesian (real and imaginary) coordinate display Linear (mV) or logarithmic (dBm) units; absolute or relative to selectable reference Recorder outputs: analog sweep, processor D/A conversion, 20 kHz IF, polar sweep, and polar/Cartesian modes

Tuner Module Options

- *ZPV-E1: 10 Hz to 50 MHz* Two BNC inputs: 1 MΩ // 17 pF impedance; accepts oscilloscope probes PLL circuit above 25 kHz; DDS circuit 10 Hz–25 kHz External 50 Ω or 75 Ω terminators for low-impedance measurements 10 mV sync input sensitivity *ZPV-E2: 100 kHz to 1 GHz (usable to 1.2 GHz)* Two high-impedance probes: 50 kΩ / 2 pF *ZPV-E3: 0.3 GHz to 2 GHz (usable to 2.5 GHz)* Two 50 Ω N-socket inputs Channel A sensitivity: 1200 μV typical 400 μV (below 1 MHz); 1000 μV typical 300 μV (above 1 MHz) Channel B sensitivity: 5 μV typical 3 μV Voltage accuracy (100 mV reference): ±0.2 dB to –2.3 dB Typical

Applications Control engineering measurement and validation Crystal characterization Antenna impedance and reflection analysis Amplifier gain and phase measurement Filter response and group delay testing Network parameter characterization across DC to microwave frequencies

Features & description

From manufacturer datasheet

Features

- Two measurement channels (amplitude and phase)
- Intel 8080 controller with 1 kByte RAM in the base unit
- Modular tuner concept E1 / E2 / E3
- 20 kHz IF in the base unit
- Probe or N 50 ohm sampling heads depending on tuner

Applications

- Complex voltage, ratio, and phase measurements
- Crystal, filter, and amplifier characterization
- Antenna and control-loop measurements
- Two-port network quantities from normalized vectors
- Selective RF voltmeter with phase

ZPV Characteristics / Specifications

PARAMETER	VALUE
Model	ZPV
Manufacturer	Rohde & Schwarz
Instrument Type	Vector analyzer / vector voltmeter
Alias	ZPV; R&S ZPV
Family Frequency Span	10 Hz to 2 GHz (tuner dependent)
IF Frequency	20 kHz
Channels	two (reference and test)
Measured Quantities	voltage, voltage ratio, phase, normalized complex parameters
Base Processor	Intel 8080, 1 kByte RAM
Tuner ZPV E1 Class	10 Hz to 50 MHz or 100 kHz to 1 GHz (medium-impedance probes)
Tuner ZPV E2 Class	sampling probes, HP 8405A-inspired sampling architecture
Tuner ZPV E3 Range	300 kHz to 2 GHz
Tuner ZPV E3 Inputs	N sockets, 50 ohm
ZPV E3 Sampling	diode bridges at the N sockets (no long probe leads)
ZPV E1 Probes	permanently attached medium-impedance probes
Sampling VCO Low Range	about 0.12 MHz to 2.75 MHz (E2 class)
Sampling Oscillator	L/C around 2.4 MHz (E2 class)
IF Principle	sampling mix to 20 kHz
Phase Measurement	two-channel vector
Amplitude Measurement	two-channel vector voltmeter
Network Role	microprocessor conversion to complex quantities
Form Factor	modular mainframe plus plug-in tuner
Intended DUTs	crystals, antennas, amplifiers, filters, control loops
Connector Class E	N 50 ohm
Connector Class E1 E	probe tips with BNC/N adapters

PARAMETER

VALUE

Upper Frequency E

2 GHz

Lower Frequency Family

10 Hz (E1 low-range class) Notes Specs from R&S ZPV vector analyzer/voltmeter documentation and tuner descriptions (E1/E2/E3). Confirm which tuner is installed; frequency span is entirely tuner-dependent. Do not quoteasingle 10 Hz to 2 GHz range unless the matching tuner is present.

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	ZPV
Manufacturer	Rohde & Schwarz
Instrument Type	Vector analyzer / vector voltmeter
Alias	ZPV; R&S ZPV
Family Frequency Span	10 Hz to 2 GHz (tuner dependent)
IF Frequency	20 kHz
Channels	two (reference and test)
Measured Quantities	voltage, voltage ratio, phase, normalized complex parameters
Base Processor	Intel 8080, 1 kByte RAM
Tuner ZPV E1 Class	10 Hz to 50 MHz or 100 kHz to 1 GHz (medium-impedance probes)
Tuner ZPV E2 Class	sampling probes, HP 8405A-inspired sampling architecture
Tuner ZPV E3 Range	300 kHz to 2 GHz
Tuner ZPV E3 Inputs	N sockets, 50 ohm
ZPV E3 Sampling	diode bridges at theNsockets (no long probe leads)
ZPV E1 Probes	permanently attached medium-impedance probes
Sampling VCO Low Range	about 0.12 MHz to 2.75 MHz (E2 class)
Sampling Oscillator	L/C around 2.4 MHz (E2 class)
IF Principle	sampling mix to 20 kHz
Phase Measurement	two-channel vector
Amplitude Measurement	two-channel vector voltmeter
Network Role	microprocessor conversion to complex quantities
Form Factor	modular mainframe plus plug-in tuner
Intended DUTs	crystals, antennas, amplifiers, filters, control loops
Connector Class E3	N 50 ohm
Connector Class E1 E2	probe tips with BNC/N adapters
Upper Frequency E3	2 GHz

PARAMETER	VALUE
Lower Frequency Family	10 Hz (E1 low-range class)

Notes
Specs from R&S ZPV vector analyzer/voltmeter documentation and tuner descriptions (E1/E2/E3). Confirm which tuner is installed; frequency span is entirely tuner-dependent. Do not quoteasingle 10 Hz to 2 GHz range unless the matching tuner is present.

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

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.