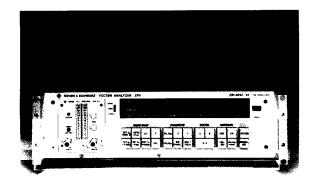
VECTOR ANALYZER

Model ZPV 10 Hz to 2 GHz

- Dual-channel vector voltmeter
- Display linear or log, cartesian or polar, absolute or relative
- Ranging automatic or manual
- Software packages available for ATE applications



Model ZPV

Model ZPV is designed for critical applications in control engineering and for crystal, antenna, amplifier, and filter measurements. Three plug-in tuners and appropriate accessories optimize performance by frequency range and test methods. Measurements include amplitude and phase, y- and z- parameters, s- parameters, group delay, reflection coefficient, and impedance.

ABRIDGED SPECIFICATIONS

ZPV with Tuner ZPV-E1

ZPV-E1 features a wide dynamic range and is useful both at low frequencies, for measuring control loops and acoustic signals, and at high frequencies for video, group-delay, and impedance measurements. Two high impedance inputs accept probes, attenuators, or insertion adapters for 50 coaxial systems

FREQUENCIES

10 Hz - 50 MHz

Dual-inputs

1 M Ω and 17 pF

Impedance Sensitivity

5 μV, 30 Hz - 50 kHz

1 μV, 50 kHz - 25 MHz

 $3 \mu V$, >25 MHz

VOLTAGE ACCURACY

0.15 dB typ

VOLTAGE RATIO Range

Accuracy

-110 to +110 dB

PHASE

±1.5% typ

-180° to +180° Range

Accuracy (see Note)

0.1°

ZPV with Tuner ZPV-E2

ZPV-E2 covers higher frequencies than the ZPV-E1. With two high impedance probes, it can be used to measure voltages in both matched and unmatched systems. Directional couplers are also available.

FREQUENCY

0.1-1000 MHz

DUAL-INPUTS

Impedance

50 k Ω and 2 pF, 6 M Ω and

2 pF with 100:1 attenuator

Sensitivity

Channel A

1200 μ V (typ 400 μ V), <1 MHz

400 μV (typ 150 μV), >1 MHz

Channel B

3 μV (typ 1 μV)

VOLTAGE ACCURACY (100 mV)

0.4 dB. < 0.3 MHz 0.2 dB, 0.3-100 MHz 0.6 dB. 100-500 MHz

1.5 dB, >500 MHz

VOLTAGE RATIO

Range

-90 to +70 dB

Accuracy

1.5%, >250 MHz

PHASE

Range

-180° to +180°

Accuracy (see Note)

0.5°

ZPV with Tuner ZPV-E3

ZPV-E3 allows vector measurements, two-port and groupdelay measurements in 50 ohm coaxial systems over a wide frequency and amplitude range.

FREQUENCY

0.3 - 2000 MHz, usable to 2.5 GHz

DUAL-INPUTS

Impedance

 50Ω

Sensitivity

Channel A

 $1200 \mu V$ (typ $400 \mu V$), <1 MHz

1000 μ V (typ 300 μ V), >1 MHz

Channel B

 $5 \mu V \text{ (typ 3 }\mu V\text{)}$

VOLTAGE ACCURACY (100 mV)

±0.2 dB, <100 MHz

±0.5 dB, 100-500 MHz ±1.2 dB, 500-1500 MHz

+1.2/-2.3 dB, > 1500 MHz

VOLTAGE RATIO

Range

-90 to +70 dB

Accuracy

1.5%, >1020 MHz

PHASE

Range

-180° to +180°

Accuracy (see Note)

0.5°

NOTE: Phase accuracy is frequency and amplitude dependant.