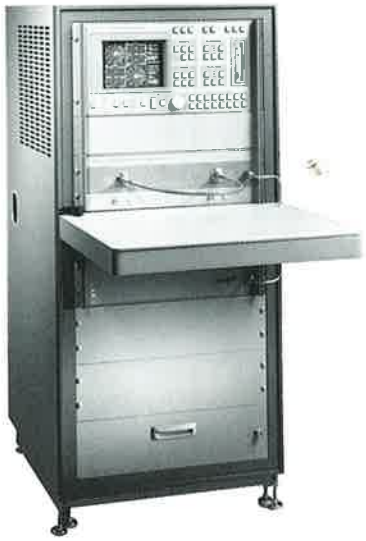
Anritsu

COAXIAL VECTOR NETWORK ANALYZER

360B

40 MHz to 110 GHz

Supports Coaxial and Waveguide Devices



CE GPIB

The 360B VNA (Vector Network Analyzer) builds upon a foundation of exceptional measurement accuracy, capability, and ease-of-use. The 360B VNA measures the S-parameters, gain, phase, and group delay characteristics of a wide variety of microwave components, systems, and subsystems. A large selection of coaxial test sets and signal sources are available to match your DUT connector type, frequency range, and performance requirements. Supporting calibration and verification kits, test fixtures, test port cables, and other measurement accessories complete your measurement solution.

Features

- 40 MHz to 67 GHz coverage in coax
- Four independent display channels
- Flexible calibrations
- Up to 100 dB dynamic range
- Time domain analysis
- Intuitive user interface

- **Continuous coaxial coverage to 67 GHz**

The coaxial frequency coverage of the 360B series is unmatched. Continuous coverage is available from 40 MHz to 65 GHz (67 GHz with test set Option 6). Engineers in both commercial and defense sectors can benefit from designing in coax to 67 GHz – reducing systems size and weight. 67 GHz coverage also significantly increases the resolution of time domain measurements, allowing more accurate designs. Extensive OSL; offset short, and LRL/LRM calibration software with dispersion compensation let you accurately measure your coaxial, microstrip, waveguide, and on-wafer devices.

- **Measurement stability**

Accurate measurements depend on a VNA's ability to maintain its calibrated state. Over time, significant factors such as temperature change, cable flexure, and frequency drift contribute to random measurement errors. The 360B VNA counters these effects with temperature-stable components, minimized cabling, fewer interconnections, and a unique phase-locking scheme. With the 360B VNA, your measurements are repeatable several days after calibration.

Measurement applications

- **On-wafer devices**

Make fully error-corrected measurements of your on-wafer devices to 67 GHz with the 360B VNA and a wafer probing station. Air dielectric test port couplers offer excellent uncorrected directivity and test port match over the entire 40 MHz to 67 GHz frequency range. For best performance, every coaxial test set contains all necessary measurement components in a single, compact unit that can be easily located next to your wafer probing station. The 360B supports flexible OSL, LRL, and LRM calibration methods for optimal on-wafer accuracy.

For applications up to 110 GHz, a broadband system covers the range of 40 MHz to 110 GHz in a single coaxial output, W type. The VNA displays a single broadband trace. For more information on this broadband system please call your local Anritsu representative.

For product ordering information, see pages 4-7.

Table 1 Test set dynamic range summary

Test set model	Frequency (GHz)	Max. signal into port 2 (dBm)	Noise floor (dBm)	Receiver dynamic range (dB)	Port 1 power (dBm, typical)	System dynamic range (dB)
3612A Reversing Test Set	0.04	+20	–95	115	–10	85
	1	+3	–112	115	–11	101
	20	+3	–108	111	–17	91
	40	+3	–105	108	–22	83
	50	+3	–90	93	–15	75
	60	+3	–87	90	–17	70
	62.5*1	+3	–85	88	–18	67
3613A Reversing Test Set	0.04	+20	–95	115	–10	85
	1	+3	–112	115	–11	101
	20	+3	–108	111	–17	91
	40	+3	–105	108	–22	83
	60	+3	–87	90	–17	70
	65	+3	–83	86	–19	64
3622A Active Device Test Set	0.04	+30	–95	125	–10	85
	1	+30	–112	142	–11	101
	20	+30	–107	137	–18	89
	40	+30	–103	133	–24	79
	50	+30	–89	119	–19	70
	60	+30	–86	116	–21	65
	62.5*1x	+30	–84	114	–22	62
3623A Active Device Test Set	0.04	+30	–95	125	–10	85
	1	+30	–112	142	–11	101
	20	+30	–107	137	–18	89
	40	+30	–103	133	–24	79
	60	+30	–86	116	–21	65
	65	+30	–82	112	–22	60

*1: Available with test set Option 5, 62.5 GHz frequency coverage.

Ordering information

Please specify model/order number, name, and quantity when ordering.

Model/Order No.	Name
	Main frame
360B	Vector Network Analyzer (10 MHz to 110 GHz)
Option 1	Rack-mount slides and ears
Option 2A	High-speed time (distance) domain
Option 5	Set-on receiver mode
360C1	Millimeter-Wave System Console (supports rails and power distribution)
	Test sets
3612A	Reversing Test Set (40 MHz to 60 GHz, V male test port connector)
3613A	Reversing Test Set (40 MHz to 65 GHz, V male test port connector)
3622A	Active Device Test Set (40 MHz to 60 GHz, V male test port connector)
3623A	Active Device Test Set (40 MHz to 65 GHz, V male test port connector)
	System source
68169B	Synthesized Sweep Generator (10 MHz to 40 GHz, 1 kHz frequency resolution)
	Calibration kit
3654B	V Connector (10 MHz to 65 GHz, includes sliding loads)
	Verification kit
3669B	V Connector (10 MHz to 65 GHz, includes Beatty standard, airline, 20 and 40 dB precision attenuators)

3