Quick Fact Sheet

Agilent N1996A Spectrum Analyzer



- 1. Light weight and portable at 8.5 kg with batteries
- 2. Bright, high resolution, 21.4 cm XGA display is excellent for outdoor use
- 3. Easy user interface speeds measurement process and reduces training time
- 4. USB 1.1 ports simplify data transfer and connectivity
- 5. 1 dB step attenuator (best in class)
- 6. Built-in preamplifier increases sensitivity
- 7. VSWR bridge is built-in, reducing the complexity of stimulus/response measurements
- 8. Built-in help
- 9. Shallow depth of 25 cm (with bumpers) conserves bench space
- 10. Signal source enables system, cable, and component measurements



Top three qualifying value statements

Best choice for general spectrum analysis up to 6 GHz

- DANL: -138 dBm/Hz, -156 dBm/Hz w/preamp
- Overall amplitude accuracy: $\pm 0.5 \text{ dB}$
- Best-in-class dynamic range with +18 dBm TOI

Most cost-effective choice for device characterization

- Built-in VSWR bridge
- Frequency: 10 MHz to 3/6 GHz
- Insertion loss, return loss and power suite

Easy-to-Use, reducing the need for technical training

- Auto tune, auto scale, auto range
- 8.4" TFT color screen
- 8.5 kg with batteries
- Built-in help



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Specification	Agilent N1996A
Frequency range	100 kHz to 3/6 GHz
RBW	10 Hz to 5 MHz
DANL	-128 dBm, -138 dBm/Hz
DANL w/preamp	-146 dBm, -156 dBm/Hz
TOI	+18 dBm nominal
1 dB compression (nominal)	+13 dBm
Phase noise	-85 dBc/Hz
Input attenuator	40 dB, 1 dB step
Overall accuracy	±0.5 dB
Remote control interface	LAN
Weight	7.5 kg, 8.5 kg w/battery
Dimension (W x H x D)	177 x 425 x 232 mm

Stimulus/Response Measurement Suite

The N1996A provides easy to use Stimulus/Response Measurement Suite (ordering number N8995A-SR3/SR6) for device characterization.

The Stimulus/Response (S/R) Measurement Suite comprises four measurements: Two-port insertion loss, one-port insertion loss, distance-to-fault (DTF), and return loss. In order to demonstrate these measurements, a DUT is required. For two-port insertion loss, a filter is recommended. For all other measurements, some length of cable is required. Two different measurements are shown below: two-port insertion loss and distance-to-fault.



Stimulus/response – two-port insertion loss

Recommended service options www.agilent.com/find/removealldout

 R-51B-001-3C
 Return-to-Agilent warranty – extended to 3 years

 R-50C-011-3
 Return-to-Agilent calibration – 3 years

Product specifications and descriptions in this document subject to change without notice.

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Rart Freg 10 MHz			Avg: Exponential (4/4)		Serve	
Coble Type: RG-0/A Colloctod(10 MHz - 200 MHz)			Measured Distance: 66.59 m			
					Type	
					Server.	
10		$ \wedge $			Format	
2.0					Name	
10 V~		3.0 6.0 7.0		12.0 12.0 14.0	He Location	
turn Lons tance	-0.6 dB 6-41 m	38.0 db 6.0 m	42.1 dB 12.94 m	42.7 dB 10.29 m	Catalog	

Stimulus/response – distance to fault

N1996A target areas

Basic R&D		
Installation and maintenance		
Bench repair		
Electronic manufacturing		
NA 11		
IVIODEI	Description	
N1996A	Spectrum analyzer 9 kHz to 6 GHz	
Options	Description	
N1996A-503	100 kHz to 3 GHz	
N1996A-506	100 kHz to 6 GHz	
N1996A-P03	Preamplifier, 3 GHz	
N1996A-P06	Preamplifier, 6 GHz	
N1996A-AFM	AM/FM tune and listen	
N8996A-1FP	AM/FM demodulation analysis	
N1996A-271	Spectrogram measurement suite	
N8995A-SR3	Stimulus-response suite, 3 GHz	
N8995A-SR6	Stimulus-response suite, 6 GHz	
N1996A-1CM	Rack-mount kit	
N1996A-SCC	Soft carrying case	
N1996A-BAT	Battery pack, 2 pieces	
N1996A-BCG	External battery charger	
N1996A-SRK	Stimulus response calibration kit	
N1996A-ABA	Measurement guide - English	
N1996A-AB2	Measurement guide - Simplified Chinese	
N1996A-ABJ	Measurement guide - Japanese	
N1996A-0BW	Service documentation	
Accessories	Description	
Documentation CD	N1996A manual set (PDF format)	
Power cord	Specific to shipping location	
AC/DC converter	External power supply 15 VDC, 150 W	

