

ADVANTEST

R3361A

The Advantest R3361A is a high-performance, easy-to-use portable spectrum analyzer operating in the frequency range of 9 Hz to 2.6 GHz. Featuring a built-in tracking generator, 1 Hz resolution frequency setting, and a 1 Hz resolution frequency counter, it is optimized for accurate RF testing and measurement in both field and bench environments.

SPECIFICATIONS

General

Interfaces	GPIB, Memory Card Slot
Display	Monochrome CRT

Physical

Power Supply	90 to 132 V AC / 198 to 250 V AC, 48 to 66 Hz, ≤ 150 VA
Operating Temperature	0 to 50 °C °C
Dimensions (W×H×D)	300 mm × 177 mm × 450 mm mm
Weight	15 kg kg

Frequency Specifications

Frequency Range	9 Hz to 2.6 GHz (with Option 21; standard range 9 kHz to 2.6 GHz)
Frequency Span Range	0 Hz (zero span), 1 kHz to 2.6 GHz
Frequency Tuning Resolution	1 Hz
Frequency Counter Resolution	1 Hz
Frequency Reference Stability	$\pm 2 \times 10^{-6}$ / year

Bandwidth (RBW/VBW)

Resolution Bandwidth (RBW) Range	30 Hz to 1 MHz (1-3 sequence)
Video Bandwidth (VBW) Range	1 Hz to 1 MHz (1-10 sequence)

Amplitude & Measurement Range

Measurement Range	-130 dBm to +25 dBm
Maximum Safe Input RF Power	+25 dBm (with ≥ 10 dB input attenuation)
Maximum DC Input Voltage	0 V DC
Input Attenuator Range	0 to 50 dB (in 10 dB steps)
Display Range	80 dB (10 dB/div)

Dynamic Range & Noise

Displayed Average Noise Level (DANL)	-121 dBm (at 1 kHz RBW)
1 dB Compression Point	-10 dBm (for frequencies > 10 MHz)

Sweep & Trigger Specifications

Sweep Time Range (Span > 0 Hz)	50 ms to 1000 s
Sweep Time Range (Zero Span)	20 ms to 1000 s

Tracking Generator

Tracking Generator Frequency Range	9 kHz to 2.6 GHz (9 Hz to 2.6 GHz with Option 21)
Tracking Generator Output Level Range	0 to -59.9 dBm
Tracking Generator Output Flatness	±1.5 dB (9 kHz to 2.6 GHz)
Tracking Generator Output Level Resolution	0.1 dB

Inputs, Outputs & Connectivity

RF Input Connector Type	N-type female
RF Input Impedance	50 Ω
Tracking Generator Output Connector	N-type female
External Reference Input	10 MHz (BNC female)

Display & User Interface

Measuring Window Function	Built-in dual-window zoom and analysis functionality
User-Defined Functions	Supported for custom measurement setup and recall

Physical & Environmental Specifications

Operating Humidity	≤ 85% RH (non-condensing)
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Amplitude & Level

Amplitude Reference Level Range	-110 dBm to +40 dBm
Frequency Response Flatness	±1.0 dB (9 kHz to 2.0 GHz), ±1.5 dB (9 kHz to 2.6 GHz) (with 10 dB input attenuation)

Dynamic Range & Distortion

Second Harmonic Distortion	≤ -70 dBc (for -30 dBm input, 10 MHz to 2.6 GHz)
Third-Order Intermodulation Distortion	≤ -75 dBc (for two -30 dBm inputs spaced > 50 kHz, 10 MHz to 2.6 GHz)

Spectral Purity

Noise Sidebands (Phase Noise)	≤ -105 dBc/Hz (at 20 kHz offset, RBW 30 Hz)
Residual FM	≤ 20 Hz p-p / 100 ms

Sweep & Trigger

Sweep Trigger Source	Free Run, Line, Video, External, Single
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Display

Display Scale Settings	10 dB/div, 5 dB/div, 2 dB/div, 1 dB/div, Linear
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Features & Demodulation

Audio Demodulation	AM and FM (built-in speaker and headphone jack)
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Interfaces

GPIB Interface	IEEE-488 standard
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Options & Accessories

Option 01	Option 01 = High-stability reference oscillator ($\pm 2 \times 10^{-8}$ /day)
Option 15	Controller Function (enables BASIC programming)

Calibrator

Calibrator Output Frequency	30 MHz
Calibrator Output Level	-20 dBm

Power Specifications

AC Power Input	90 V to 132 V / 198 V to 250 V, 48 Hz to 66 Hz
Power Consumption	≤ 150 VA

Inputs & Outputs

Reference Frequency Output	10 MHz
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Environmental & Storage

Storage Temperature Range	-20 °C to +60 °C
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TECHNOLOGY

Superheterodyne Spectrum Analyzer

APPLICATIONS

RF and Microwave Spectrum Analysis

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.