

## Spectrum Analyzers R3261, R3361

(100 Hz) 9 kHz to 3.6 GHz

General applications in development, production, testshop and service as well as EMC precertification

R3261C



### Brief description

Spectrum Analyzers of the 3261 and 3361 Series (Advantest) provide synthesizer operation with high frequency accuracy and stability, 30 Hz resolution bandwidth and -130 dBm sensitivity. For specified setting conditions the total level accuracy is <1 dB. The digital functions provide great ease of operation and signal processing capabilities like top-class instruments.

### Operation

User-defined parameters can be entered via the numeric keypad. Softkey-controlled menus reduce the number of function keys and avoid keys being assigned double functions. The user can configure application-specific softkey menus. A memory card of credit card size and the built-in memories allow program sequences, instrument settings and waveforms to be stored and recalled. Antenna correction factors and limit lines can be entered via the front-panel keys. A window function allows a faster sweep time in defined display ranges.

### Overview of models

**R3261C:** 9 kHz to 2.6 GHz

**R3261D:** 9 kHz to 3.6 GHz

**R3361C:** same as R3261C but with built-in tracking generator, 9 kHz to 2.6 GHz

**R3361D:** same as R3261D but with built-in tracking generator, 9 kHz to 3.6 GHz

**R3261CN, R3361CN:** models with 75  $\Omega$  adapter

# Spectrum Analyzers R3261, R3361

## Specifications in brief

Frequency range	9 kHz to 2.6 GHz
R3261C	9 kHz to 3.6 GHz
R3261D	30 Hz to 1 MHz, auto, QP (6 dB): 200 Hz/9 kHz/120 kHz
Resolution bandwidths	15 : 1
Shape factor	1 kHz to 2.6 GHz/zero span, log display 1 to 3 decades, start/stop
Frequency span/division	<300 Hz/min
Frequency stability	<20 Hz ( $V_{pp}$ )/0.1 s (span <2 MHz)
Residual FM	-131 to +25 dBm/±50 V (DC)
IM-free input level	>70 dB
Dynamic range	(-121 dBm +1.5 x f/GHz) dBm
Inherent noise (1 kHz)	-100 dBm (>500 kHz)
Residual responses	-105 dBc(Hz) at 20 kHz
Phase noise	±0.5 dB (<2 GHz)
Frequency response	-109 to +40 dBm/0.1 dB
Reference level	dBm, dBμV, V, dB(μV/m), dBmV, dBpW
Level units	log 10/5/2/1/0.5/0.2/0.1 dB, lin x1/x2/x4/x8
Level resolution	0 to 50 dB/10 dB
RF attenuator	1 Hz to 1 MHz in 1 to 10 sequence
Video filter	30 ms to 1000 s, manual, automatic
Sweep time	average, max hold, default offset,
Evaluation functions	2 display memories, marker peak search, delta marker, x dB down, marker next peak, signal track, frequency counter with 1 Hz resolution, bandwidth measurement, dBc(Hz), dBm(Hz), display line, multimarker, etc

### Internal tracking generator

Frequency range R3361C	9 kHz to 2.6 GHz
R3361D	9 kHz to 3.6 GHz
Output level	0 to -59 dBm in 1 dB steps
Frequency response	±0.7 dB (<1 GHz)
Output impedance	50 Ω, VSWR <1.5:1 (<2 GHz); models CN, DN: 75 Ω

### General data

Interfaces	IEC 625 bus (IEEE 488)
Dimensions (W x H x D)	330 mm x 132 mm x 450 mm
Weight	15 kg

## Ordering information

### Spectrum Analyzer

9 kHz to 2.6 GHz	R3261C
9 kHz to 3.6 GHz	R3361D

### Options

RS-232 I/O Interface, Gated Sweep	80
Integrated BASIC Controller, RS-232 I/O Interface, 2nd IEEE Bus, Gated Sweep	81
Frequency Range Extension 100 Hz	91

### Extras

IEC/IEEE-Bus Cable 1 m/2 m	408JE-101/102
19" Adapter 4 HU	A02455
Front Cover	A02804
Memory Card 32 k (standard)	A09505-1
Memory Card 128 k	A09506-1
DOS Software for program-controlled EMC precertification	EPS9980
External EMC Preselector	AUP9211A
Pulse Limiter 9 kHz to 30 MHz	CFL9206
Preamplifier	R14601
Impedance Converter 1 M	R14602
Aluminium Transit Case	R16056A
Carrying Case	R16211
DOS Software for PC control of analyzer	SPECTRA
TDR Measurement Software (Windows)	RSWinTDR