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 Ω adapter

Spectrum Analyzers R3261, R3361

Specifications in brief

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