

ANRITSU

MS2665C

The Anritsu MS2665C is a compact, lightweight, and low-price spectrum analyzer designed for a wide range of RF and microwave applications. Covering a frequency range from 9 kHz to 21.2 GHz, it features high C/N ratio, low distortion, and excellent frequency and level accuracies, making it ideal for both manufacturing and field-service applications.

SPECIFICATIONS

General

Interfaces	GPIO (IEEE-488.2), RS-232C, Centronics Parallel Printer Port
Display	5.5-inch color TFT LCD
Built-in Measurement Functions	Channel power, ACPR, OBW, Frequency counter, Noise power
Storage Temperature Range	-20 to +60 °C
AC Input Voltage	100 to 120 V / 200 to 240 V (auto-selectable)
AC Input Frequency	47.5 to 63 Hz
Power Consumption (Maximum)	<= 150 VA (without options)
Number of Trace Detectors	Normal, Positive Peak, Negative Peak, Sample
Internal Trace Memory Capacity	Up to 10 traces
Internal Setup Memory Capacity	Up to 12 setups

Physical

Power Supply	100 to 120 V AC / 200 to 240 V AC, 47.5 to 63 Hz, <= 150 VA
Operating Temperature	0 to 50 °C °C
Dimensions (W×H×D)	320 × 177 × 351 mm mm
Weight	13 kg

Frequency

Frequency Range	9 kHz to 21.2 GHz
Frequency Span Range	0 Hz, 100 Hz to 21.2 GHz
Tuning Resolution	1 Hz
Frequency Reference Standard Aging Rate	+2 x 10 ⁻⁶ per year
Frequency Reference Temperature Stability	+5 x 10 ⁻⁶ (0 to 50 °C)
Display Resolution (Frequency)	1 Hz
Frequency Reference Aging Rate (Option 01)	+2 x 10 ⁻⁸ per day
Frequency Bands	Band 0: 9 kHz to 3.1 GHz; Band 1: 3.1 GHz to 8.1 GHz; Band 2: 8.1 GHz to 12.4 GHz; Band 3: 12.4 GHz to 21.2 GHz

Spectral Purity

SSB Phase Noise (10 kHz offset)	≤ -100 dBc/Hz (at 1 GHz)
SSB Phase Noise (100 kHz offset)	≤ -110 dBc/Hz (at 1 GHz)

Bandwidth

Resolution Bandwidth (RBW) Range	1 kHz to 3 MHz (in 1, 3 sequence), 5 MHz
RBW Filter Type	3 dB Bandwidth
Video Bandwidth (VBW) Range	10 Hz to 3 MHz (in 1, 3 sequence)
Resolution Bandwidth Low Range (Option 02)	30 Hz, 100 Hz, 300 Hz

Amplitude

Maximum Safe RF Input Level (CW)	+30 dBm (with RF Attenuation ≥ 10 dB)
Maximum Safe DC Input Voltage	0 V (DC coupled)
Input Attenuator Range	0 to 70 dB in 10 dB steps
DANL (3.1 GHz to 8.1 GHz)	≤ -110 dBm (RBW 1 kHz, VBW 1 Hz)
DANL (8.1 GHz to 12.4 GHz)	≤ -105 dBm (RBW 1 kHz, VBW 1 Hz)
DANL (12.4 GHz to 21.2 GHz)	≤ -95 dBm (RBW 1 kHz, VBW 1 Hz)
1 dB Gain Compression Point	≥ -10 dBm (at ≥ 200 MHz, mixer input)
Third-Order Intermodulation Distortion (TOI)	$\geq +5$ dBm (100 MHz to 3.1 GHz, mixer input -30 dBm)
Second Harmonic Distortion	≤ -70 dBc (100 MHz to 1.5 GHz, mixer input -30 dBm)
Frequency Response (9 kHz to 3.1 GHz)	± 0.5 dB
Log Display Scale	1, 2, 5, 10 dB/div
Amplitude Measurement Range	DANL to +30 dBm
Input Attenuator Steps	10 dB

Inputs & Outputs

RF Input Impedance	50 ohms nominal
RF Input Connector	N female
External Reference Input Frequency	10 MHz
External Reference Input Level	-10 to +20 dBm
Internal Reference Output Frequency	10 MHz
Internal Reference Output Level	>= -5 dBm (into 50 ohms)
Trigger Input Connector	BNC female
Reference Input Impedance	50 ohms nominal
Memory Card Slot	PCMCIA Type II
RF Input VSWR (9 kHz to 3.1 GHz)	<= 1.5 (RF attenuation >= 10 dB)
RF Input VSWR (3.1 GHz to 21.2 GHz)	<= 2.0 (RF attenuation >= 10 dB)
Printer Interface	Centronics (Parallel)
Calibration Signal Output Frequency	10 MHz
Calibration Signal Output Level	-20 dBm +/-0.3 dB
Calibration Output Connector	BNC female
External Reference Input Connector	BNC female
Internal Reference Output Connector	BNC female
Sweep Output Connector	BNC female (rear panel)
Video Output Connector	BNC female (rear panel)
External Display Output	15-pin D-sub (VGA, rear panel)
Gate Input Level	TTL level (shared with trigger input)

Sweep

Sweep Time Range (Span > 0 Hz)	20 ms to 1000 s
Sweep Time Range (Zero Span)	20 us to 1000 s
Sweep Trigger Sources	Free Run, Line, External, Video
Number of Sweep Points	501
Option 04 Fast Sweep Range (Zero Span)	12.5 us to 1000 s

Compliance

EMC Standards Compliance	EN55011, EN50082-1
Safety Standards Compliance	EN61010-1

Demodulation

AM/FM Demodulation	Standard built-in speaker and phone jack for AM/FM audio monitoring
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Performance

Trace Functions	Normal, Write, Max Hold, Min Hold, View, Average
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Option-dependent Specifications

Frequency Reference Temperature Stability (Option 01)	$\pm 5 \times 10^{-8}$ (0°C to 50°C)
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Display

Linear Display Scale	10 divisions
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Marker Functions

Frequency Counter Resolution	1 Hz, 10 Hz, 100 Hz, 1 kHz
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Power Supply

DC Power Input Voltage (Option 07)	11 V to 21 V DC
DC Power Consumption (Option 07)	≤ 70 W

Environmental

Operating Humidity Range	≤ 85% (non-condensing)
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TECHNOLOGY

RF and Microwave Spectrum Analyzer

APPLICATIONS

RF and Microwave Signal 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.