

ANRITSU

MS2721A

The Anritsu MS2721A Spectrum Master is a highly capable handheld spectrum analyzer designed for field analysis of wireless signals up to 7.1 GHz, featuring excellent phase noise performance, low DANL, and integrated AM/FM/SSB demodulation.

SPECIFICATIONS

General

Interfaces	RJ45 Ethernet 10/100 Base T, USB 2.0
Display	Large daylight viewable transfective color display

Physical

Power Supply	External DC: 12 to 15 VDC, 5.0 A max; AC/DC Adapter: 100-240 VAC, 50-60 Hz (Output: 15 VDC, 5.0 A max); Battery: Rechargeable Li-Ion, 10.8 V, 4.8 Ah
Operating Temperature	-10 °C to 55 °C °C
Dimensions (W×H×D)	313 mm x 211 mm x 77 mm mm
Weight	3.13 kg kg

Frequency Specifications

Frequency Range	100 kHz to 7.1 GHz
Phase Noise	-100 dBc/Hz @ 10 kHz offset

Bandwidth (RBW/VBW)

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

Amplitude and Sensitivity Specifications

Displayed Average Noise Level (DANL) - Preamp On	<-153 dBm typical in 10 Hz RBW at 1 GHz
Amplitude Accuracy	±0.5 dB typical
Internal Preamplifier	Standard
Input Attenuator Control	Automatic or manual

Connectivity and Interfaces

RF Input Impedance	50 Ω
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Measurement Capabilities and Features

Number of Markers	6 markers plus 6 delta markers
Trace Display	Up to 3 traces
Trace Averaging	Supported
Reference Level Offset	Supported
Demodulation Capabilities	AM, FM, SSB (with built-in speaker and headset jack)
Limit Lines	Multi-segmented upper and lower limit lines
Setup Storage	Up to 1000 measurement test set-ups
Trace Storage	Up to 1000 measurement traces
Alphanumeric Labeling	Supported for saved measurements
Data Timestamping	Automatic time and date stamp of saved data

Hardware and Software Options

Interference Analysis Option (Option 25)	Spectrogram display, signal strength with audible tone, and RSSI
Channel Scanner Option (Option 27)	Monitor up to 20 channels or signals

Physical and Environmental

Form Factor	Handheld, battery-operated
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RF Input & Protection

RF Input Connector	Type N, female, 50 Ω
Maximum Input Level	+30 dBm (1 W) continuous, ± 50 VDC (damage level)

Frequency Reference

Frequency Reference Aging	± 1 ppm/year
Frequency Reference Temperature Stability	± 1 ppm (0 °C to 50 °C)

Sweep

Sweep Time	100 ms to 600 s (span > 0 Hz), 10 μ s to 600 s (zero span)
Sweep Trigger	Free Run, Single, Video, External

Connectivity

External Reference Input	10 MHz, BNC female, -10 dBm to +10 dBm
External Trigger Input	BNC female, TTL level

Power

Battery Operating Time	Typical > 2 hours
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Options

GPS Receiver Option (Option 31)	Provides location (latitude, longitude, altitude) and UTC time; requires external GPS antenna
Bias Tee Option (Option 10)	Provides 12 V to 24 V DC bias voltage on RF input connector (6 W max)
Transmission Measurement Option	Option 2
High Accuracy Power Meter Option	Option 19 (requires external sensor)
AM/FM/PM Demodulation Option	AM/FM/SSB Demodulator Option = Option 29

Performance

Input Attenuator Range	0 to 65 dB in 5 dB steps
Dynamic Range	> 101 dB (in 10 Hz RBW)
Third-Order Intercept (TOI)	+11 dBm typical (at 2.4 GHz, preamp off)

Environmental

Storage Temperature	-40 °C to +75 °C
Maximum Operating Altitude	4,600 m

Storage

Storage Card Slot	CompactFlash (Type I/II)
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TECHNOLOGY

RF and Microwave Spectrum Analysis

APPLICATIONS

Field Analysis of Wireless Signals, Interference Mitigation, Channel Scanning

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