

ANRITSU

MS2721B

The Anritsu MS2721B Spectrum Master is a handheld, battery-operated spectrum analyzer designed for applications up to 7.1 GHz. Weighing less than 7 pounds, it is highly portable and well-suited for field and bench engineering tasks. The instrument features a built-in preamplifier, a low Displayed Average Noise Level (DANL) of < -163 dBm at 1 GHz, and exceptional phase noise characteristics, making it ideal for analyzing 802.11a, 3G, WiMAX, broadcast AM/FM, and cellular signals. It supports numerous optional measurements including WCDMA, GSM/EDGE, HSDPA, fixed WiMAX, and a 400 kHz to 7.1 GHz tracking generator.

SPECIFICATIONS

General

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

Physical

Operating Temperature	-10 to 55 °C
Dimensions (W×H×D)	313 × 211 × 77 mm mm

Frequency Specifications

Frequency Range	Up to 7.1 GHz
Resolution Bandwidth (RBW) Range	1 Hz to 3 MHz (1-3 sequence)
Video Bandwidth (VBW) Range	1 Hz to 3 MHz (1-3 sequence)

Amplitude Specifications

Displayed Average Noise Level (DANL)	< -163 dBm (typical, in 1 Hz RBW at 1 GHz)
Overall Amplitude Accuracy	± 0.5 dB (typical)
Input Attenuator Control	Automatic or manual
Preamplifier	Built-in (standard)

Traces, Detectors, and Markers

Number of Traces	3 traces
Trace Functions	Normal, Max hold, Min hold, User settable averaging
Trace Averaging Capacity	More than 65,000 traces can be averaged
Detector Types	Quasi peak (with CISPR bandwidth included)
Number of Markers	6 markers plus 6 delta markers, or 1 marker with 6 delta markers
Limit Line Capabilities	Multi-segmented upper and lower limit lines

Measurements and Analysis

Demodulation Types	AM, FM, and SSB (built-in speaker and headset jack)
Optional Measurement Modes	WCDMA, GSM, GPRS, EDGE, HSDPA, Fixed WiMAX
Interference Analysis Capabilities	Spectrogram, Signal strength, RSSI (by option)
Channel Scanner Capabilities	User definable channel scanner (by option)
Location & Synchronization	GPS receiver option (enables location-stamping and improves time base accuracy)

RF Inputs and Interfaces

RF Input Impedance	50 ohms standard (75-ohm interface capability via instrument internal adapter loss correction)
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System and Connectivity

Audio Output / Headphone Jack	Built-in speaker and headset jack
Internal Data Storage Capacity	Store over 1000 test set-ups and save over 1000 measurement traces internally
External Storage Support	Compact Flash, USB Flash Drive
User Interface Languages	English, Chinese, French, German, Japanese, Spanish, Korean, Italian (plus capacity for 2 custom languages)
Data Logging Features	Alphanumeric labeling of saved measurements, automatic time and date stamp

Display Characteristics

Display Modes	Quick Zoom-in, Zoom-out display in 1-2-5 sequence
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Power and Battery

Battery Type	Rechargeable / field-replaceable Li-Ion battery
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Performance

Phase Noise	< -100 dBc/Hz @ 10 kHz offset at 1 GHz
Sweep Time (Zero Span)	10 μ s to 600 s
Residual Spurious Responses	< -90 dBm (RF input terminated, 0 dB attenuation, > 10 MHz)

Inputs & Outputs

RF Input Connector	Type N(f)
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Environmental

Storage Temperature	-51 °C to 71 °C
Environmental Profile	MIL-PRF-28800F Class 2

Compliance

Electromagnetic Compatibility (EMC)	EN 61326-1, EN 55011 Class A
Safety Compliance	EN 61010-1

Amplitude

Amplitude Units	dBm, dBV, dBmV, dBμV, V, W
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RF Input

Voltage Standing Wave Ratio (VSWR)	< 1.5:1 typical (≥ 10 dB input attenuation)
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Sweep & Trigger

Trigger Modes	Free Run, Single, Video, External
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TECHNOLOGY

Spectrum Analysis

APPLICATIONS

Wireless LAN, Cellular (3G, WCDMA, GSM, GPRS, EDGE, HSDPA), WiMAX, Broadcast Proofing (AM, FM, IBOC), Interference 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.