

ANRITSU

MS2712E

The Anritsu MS2712E Spectrum Master is a handheld, high-performance spectrum analyzer engineered to withstand harsh field conditions. Operating over a wide frequency range, it is designed for monitoring, locating, identifying, and analyzing cellular, 2G/3G/4G, land mobile radio, Wi-Fi, and broadcast signals. With its multi-functional capabilities, the MS2712E eliminates the need to carry multiple instruments by offering options such as an interference analyzer, GPS receiver, high-accuracy power meter, and 2-port transmission measurements, all managed via an intuitive, touchscreen user interface.

SPECIFICATIONS

General

Interfaces	USB 2.0 Host (Type A), USB 2.0 Device (Mini-B), 10/100 Base-T RJ-45 Ethernet
Display	8.4-inch resistive touchscreen, daylight-viewable, 800 x 600 resolution
Warm-up Time	15 minutes

Physical

Power Supply	AC/DC Adapter: 100 - 240 VAC, 50 - 60 Hz input, 12 - 15 VDC output; 40 W maximum consumption
Operating Temperature	-10 to 55 °C
Dimensions (W×H×D)	273 x 199 x 91 mm
Weight	3.45 kg

Frequency Specifications

Frequency Range	9 kHz to 4 GHz
Frequency Reference Accuracy	< ±50 ppb with GPS On
Frequency Reference Aging	±1.0 ppm/year
Frequency Reference Temperature Stability	±1.5 ppm (-10 °C to 55 °C)
Frequency Span Range	10 Hz to 4 GHz, plus 0 Hz (Zero Span)

Bandwidth

Resolution Bandwidth (RBW) Range	10 Hz to 3 MHz
Video Bandwidth (VBW) Range	1 Hz to 3 MHz
RBW/VBW Selection	1, 3, 10 sequence

Amplitude and Noise Performance

Dynamic Range	> 102 dB in 10 Hz RBW
Displayed Average Noise Level (DANL)	-141 dBm in 10 Hz RBW (preamplifier off)
Phase Noise	-100 dBc/Hz max @ 10 kHz offset at 1 GHz
Maximum Continuous Input Level	+30 dBm
Input Attenuator Range	0 dB to 55 dB in 5 dB steps

Measurement Capabilities and Suites

Standard Spectrum Measurements	Occupied Bandwidth, Channel Power, Adjacent Channel Power Ratio (ACPR), Carrier-to-Interference (C/I)
Interference Analyzer Functions	Spectrogram, Signal Strength, RSSI (requires Option 0025)
Trace Save-on-Event	Crossing limit line or sweep complete

RF Port and Signal Connections

RF In Connector Type	Type N, female, 50 ohms
RF Input VSWR	1.5:1 typical
External Reference Input Frequency	1 MHz, 10 MHz, 13 MHz, 15 MHz
GPS Antenna Connector	SMA, female (requires Option 0031)

Hardware Options and Configurations

2-Port Transmission Measurement	Supported with Option 0021
High Accuracy Power Meter	Supported with Option 0019
Channel Scanner	Supported with Option 0027
GPS Receiver Option	Option 0031 (includes GPS antenna)

Display and User Interface

Traces	Normal, Max Hold, Min Hold, Average, # of Averages
Detectors	Peak, Negative, Sample, Quasi-peak, and true RMS
Markers	6, each with a Delta Marker, or 1 Reference with 6 Deltas
Limit Lines	Up to 41 segments with one-button envelope creation

Power and Battery Management

Battery Type	Li-Ion, field-replaceable
Battery Operating Time	Three hours

Physical and Environmental Characteristics

Storage Temperature Range	-40 °C to 75 °C
Relative Humidity Limit	95% relative humidity, non-condensing
Maximum Operating Altitude	4,600 meters
Shock and Vibration Compliance	MIL-PRF-28800F Class 2

Data Storage and Connectivity

Internal Storage Capacity	Stores up to 2,000 traces and setup files internally
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Frequency

Tuning Resolution	1 Hz
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Performance

Sweep Time (Span)	100 ms to 600 s
Sweep Time (Zero Span)	10 μ s to 600 s
Sweep Trigger Source	Free Run, Video, External, Dual
Amplitude Accuracy	± 1.25 dB (10 MHz to 4 GHz)
Third-Order Intercept (TOI)	+16 dBm (typical at 2.4 GHz)
Second Harmonic Distortion	-54 dBc (typical at 1.6 GHz, -30 dBm input)

Options

Preamplifier Option	9 kHz to 4 GHz (Option 8)
Bias Tee Option	12 V to 32 V, 0.1 V steps, 6 W max (Option 10)
Bias Tee Output Voltage	+12 V to +32 V (0.1 V steps, Option 10)
Bias Tee Max Current	450 mA (Option 10)
I/Q Waveform Capture	Option 24
Gated Sweep	Option 90
Coverage Mapping	Option 431
AM/FM/PM Analyzer	Option 509

Connectors

RF Output Connector	Type N, female, 50 Ω (Option 21)
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RF Performance

RF Input Impedance	50 Ω
Input Attenuator Step Size	5 dB

User Interface

Display Resolution	800 x 480 pixels
Display Size	8.4 in

Power

Battery Charge Time	4 hours (typical, analyzer off)
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Compliance

EMC Compliance	EN 61326-1, EN 55011, EN 61000-4-2, EN 61000-4-3
Safety Compliance	EN 61010-1

Connectivity

USB Interface Type	Type A (2 ports), Type Mini-B (1 port)
LAN Interface	10/100 Mbps RJ45

TECHNOLOGY

Spectrum Analysis

APPLICATIONS

Cellular, land mobile radio, Wi-Fi, and broadcast signal monitoring, interference analysis, and signal quality assessment

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