Quick Fact Sheet

Field Master™ MS2070A Handheld RF Spectrum Analyzer

9 kHz to 3 GHz

Anritsu's Field Master MS2070A 3 GHz RF spectrum analyzer covers the common HF, VHF, and UHF frequency bands. Providing the performance you expect from Anritsu with the practicality required for use in the field. Developed with 20 years' experience of designing RF test instruments for field technicians, the Field Master MS2070A integrates all the essential features of a modern spectrum analyzer with traceable and warrantied specifications.

Applications include: base station and transmitter testing in the field, through direct connection or over-the-air (OTA), finding sources of interference (including from spurious, harmonics, PIM, and industrial machinery), rooftop PIM hunting, EMI pre-compliance testing, and 75 ohm cable TV testing. The Field Master MS2070A is also ideal for general purpose spectrum analysis in the lab environment where its built-in kick stand and small footprint make it the perfect complement of a fully featured bench top instruments which can be cumbersome to share and move.

Smart measurements provide built-in routines to simplify the most common transmitter measurements including; channel power, C/I, adjacent channel power, and occupied bandwidth.

Results and instruments settings are clearly displayed on a large 10-inch high resolution, multi-touch screen. The soft case provides an IP52 rating to protect from dust and rain while the screen exceeds the IK08 specification protecting against the knocks and drops inevitably experienced in the field. 5 Watts maximum input power prevents accidental power overload damage which is the most common cause of field failures.

Field Master MS2070A delivers a compelling combination of performance with portability to make it the perfect choice for both field and bench applications.

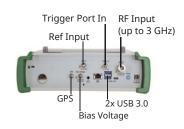


Field Master MS2070A Highlights

Spectrum Analysis from 9 kHz to 3 GHz	Full frequency coverage of HF, VHF, and UHF frequency bands
Spectrogram	Capture and record intermittent and drifting signals
Spectrum Record and Playback	Record traces and playback at slow speed to track all spectrum activity
Channel Scanner	Horizontal bar chart or strip chart with channels up to 60
AM/FM Modulation Measurements	Simultaneous display of RF spectrum, Audio
	spectrum, Audio oscilloscope, Modulation quality, SINAD and THD
Smart Measurements	Includes channel power, occupied bandwidth, adjacent channel power, spectral emissions, C/I, and field strength measurements
Interference Hunting	Directional antenna and eCompass handle
USB Power Sensor Support	Precision power measurements of transmitters
Traces and Markers	Up to 6 traces and 12 markers
Zero Span	Pulse measurements
Standard Detectors	Peak, RMS/Avg, Negative, Sample, Normal
Quasi-Peak Detector	CISPR compliant interference measurements
Battery Life	3.5 hours with standard battery, typically >6 hours with accessory power pack
10-Inch Multi-Touch Display	Provides quick and easy configuration and
GNSS (Option)	results presentation
Connectivity	GPS, Galileo, GLONASS, BeiDou
Report Generator	Ethernet, USBTMC (Wi-Fi option)
	Built in PDF/HTML report generator for screen
	captures and photographic images











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Multiple Instruments in One

Spectrum Analyzer
Spectrogram
Interference Analyzer
True Power Meter
AM/FM Modulation Measurements
Channel Scanner
Coverage Mapping
Mobile Interference Hunting (with MX280007A Software)

Key Specifications

Performance		
Sweep Speed	32 GHz/s	
Phase Noise	-97 dBc/Hz Typical @ 100 kHz Offset	
DANL	Pre Amp Off –150 dBm Typical Pre Amp On –167 dBm Typical (with preamp option)	
Maximum Input Signal	+30 dBm	
Dynamic Range	105 dB Typical	
Input Damage Level	+37 dBm (5 Watts)	
Amplitude Accuracy	±1 dB	
Resolution Bandwidth in Sweep Mode	1 Hz to 3 MHz	
Resolution Bandwidth in Zero Span	1 Hz to 5 MHz	
Frequency Accuracy	Aging: ±1.0 x 10–6 per Year	
	Accuracy: $\pm 2.8 \times 10-7$ ($-10 ^{\circ}$ C $\pm 55 ^{\circ}$ C) Plus Aging	



Key Features

Feature	Specifications
Display	10.1 in, 1280 x 800 Color Capacitive Touchscreen
Traces	Six (with Trace Record and Play Back)
Detectors	Avg/RMS, Peak, Negative, Sample, Normal
Smart Measurements	Channel Power, OBW, ACP, AJCP, SEM, C/I
Markers	12 Markers Assignable to Any Trace
Limit Lines	Complex Limit Lines with Pass/Fail
Connectivity	Ethernet, USBTMC
Wi-Fi Connectivity	Option 802.11b/a/g/n/ac
GNSS	Option GPS, GLONASS, Galileo, BeiDou
Audio Measurements	AM/FM Modulation Quality, Audio Spectrum, Audio Oscilloscope, THD and SINR
	Three Hours with Internal, Five Hours with Accessory
Battery Life	Power Pack
Size	290 mm x 212 mm x 96 mm, (11.4 in x 8.3 in x 3.7 in)
Weight	3.8 kg (8.39 lb)

Instrument Options

Option Number	Description
MS2070A Options MS2070A-0703	Field-Master-Spectrum Analyzer
MS2070A-0005	Frequency Range 9 kHz to 3 GHz
MS2070A-0008 MS2070A-0017	Wi-Fi Connectivity
	Preamplifier
MS2070A-0019*	Secure Communication
MS2070A-0024*	High Accuracy Power Meter (requires USB sensor, sold separately)
MS2070A-0027*	Interference Finder (Option 31 and directional antenna
MS2070A-0031*	recommended, sold separately)
MS2070A-0400*	Channel Scanner
MS2070A-0407*	GNSS Receiver (requires GNSS antenna, sold separately)
MS2070A-0431*	Enable Vision Monitor Enable Vision High-Speed Port Scanner
MS2070A-0509*	Coverage Mapping (Channel Power and RSSI only) (Requires Options 8 and 31)
MS2070A-0703-	AM/FM Modulation Measurements
0097	Accredited Calibration to ISO17025 and ANSI/NCSL Z540-1 (xxxx is the frequency option number)
MS2070A-0703-	Standard Calibration to ISO17025 and ANSI/NCSL Z540-1 (xxxx is the frequency option number)
0098	Premium Calibration to ISO17025 and ANSI/NCSL Z540-1 plus test data (xxxx is the frequency option number)

MS2070A-0703-



