







Anritsu Advancing beyond

Network Installation and Maintenance Testing Instruments



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Network Master Pro



Mainframe MT1000A

OTDR Module MU100020A/MU100021A/MU100022A

1310 nm/1550 nm SMF, 1310/1550/850/1300 nm SMF/MMF, 1310/1550/1625 nm SMF

Mobile Network I&M

- All-in-one OTDR, light source, optical power meter visual light source and CPRI/OBSAI with MU100010A/MU100011A
- Filtered 1650 nm port for maintenance
- Remote control over cloud and automated test without external PC
- Optical connector inspection with IEC 61300-3-35 pass/fail
- Graphical summary and pass/fail evaluation using Fiber Visualizer function
- Intuitive touch-screen operation



The OTDR module lineup includes the MU100021A for OTDR measurements of both SM and MM fibers in high demand by the mobile network I&M, plus the MU100020A/MU100022A/MU100023A for OTDR measurements of SM fiber used by PON networks and long-range measurements in Core/Metro networks.

ACCESS Master™



MT9085 series 850 nm/1300 nm (MM), 1310/1490/1550/1625/1650 nm (SM)

All-in-One Solution for Optical Fiber Construction and Maintenance of Core, Metro and Access Networks

- 8-inch LCD with easy visibility even in direct sunlight
- Better work efficiency with synergy of LCD touchscreen, rotary knob, and dedicated hard keys
- Easy-to-Use Fiber Visualizer function for simple fiber path analysis

The MT9085 series is a compact handheld all-in-one tester for performing optical pulse tests, optical loss/power measurements, and optical fiber end-face inspections. It has a wide variety of applications, ranging from installation and maintenance (I&M) of trunk fibers (Core, Metro, Mobile Fronthaul, Mobile Backhaul) to troubleshooting Access networks, such as breaks in drop cables.



Network Master™

Mainframe MT9090A

μOTDR Module™ MU909014/MU909015

1310/1490/1550 nm plus filtered 1650 nm or 1625 nm

Field Optical Testing Redefined

- High-performance OTDR in a pocket-size package with unique battery operation
- Tri-wavelength OTDR for both installation and maintenance
 - 1310/1490/1550 nm plus filtered 1650 nm or 1625 nm
- Built-in PON power meter, loss test set and light source function
- "Fiber Visualizer" mode simplifies operation, no OTDR knowledge needed
- Bluetooth, WLAN and Ethernet connectivity



The MU909014/15 series for the MT9090A from Anritsu finally addresses this need by providing all of the features and performance required for installation and maintenance of optical fibers in a compact.

The MT9090A represents an unmatched level of value and ease of use, while not compromising performance. Data sampling of five centimeters, dead zones of less than 0.8-meter and dynamic range up to 38 dB ensure accurate and complete fiber evaluation of any network type – premise to access, metro to core...including PON-based FTTx networks featuring up to a 1 × 64 split.

Optical Loss Tester/Light Source/Optical Power Meter

CMA5 series 850 nm/1300 nm (MM), 1310/1490/1550/1625 nm (SM)

For Optical Fiber Installation and Maintenance

- Built-in light source and power meter (Optical Loss Tester)
- Two wavelengths at one port (Light Source)
- Level measurement up to +23 dBm (Optical Power Meter)

The compact and durable design of the CMA5 series make these instruments the ideal combination of light source and optical power meter for measuring optical power when installing and servicing optical fiber cables.



Video Inspection Probe

Autofocus Video Inspection Probe G0382A

Video Inspection Probe G0306C

Optical Connector End Face Inspection

- Fully automated one-button operation (G0382A)
- Supported pass/fail analysis with the IEC61300-3-35 standard
- Wide range of adaptors available

The Video Inspection Probe (VIP) application for Anritsu field testing platforms gives operators a safe, easy way to analyze and document connector conditions.



G0306C

G0382A



Network Master Pro



Network Master Pro MT1040A
400G (QSFP-DD) Multirate Module MU104014A
400G (OSFP) Multirate Module MU104015A
100G Multirate Module MU104011A

One unit supporting 400G Ethernet I&M

- Supports network speeds from 10 Mbps to 400 Gbps
- Continuous and quantitative 400G FEC measurements
- Remote control over cloud and automated tests without external PC
- Compact and lightweight for easy portability



The MU104014A support QSFP-DD module and a dual-port interface for speeds from 10M to 100G for evaluating network equipment. The MU104015A supports OSFP modules for evaluating 400G. The MU104011A has a dual-port interface for speeds of 100G or less. In addition, by combining 2 measurement modules, MT1040A can test 2-port 400G Ethernet and also perform equipment evaluation tests.

Network Master Pro



Mainframe MT1000A
10G Multirate Module MU100010A
100G Multirate Module MU100011A

All-in-One Transport Tester for Metro and Backhaul Network Installation and Maintenance

- Supports testing from 1.5 Mbps to 100 Gbps
- Remote operation & scripting
- Remote control over cloud and automated tests for standalone
- Compact, lightweight design for maximum field portability

The modular design of the Network Master Pro MT1000A platform makes it easy to support I&M for different network configurations. Combining it with the 10G Multirate Module MU100010A offers the necessary functions for I&M of networks at speeds from 1.5 Mbps to 10 Gbps. Combining with the 100G Multirate Module MU100011A, it supports more interface standards than any other handheld transport tester on the market such as CFP4/QSFP28, QSFP+, SFP28 (25 GbE), SFP+/SFP and RJ45. MU100090B enables easy Pass/Fail evaluations when installing and commissioning time and phase synchronous networks.



Site Over Remote Access



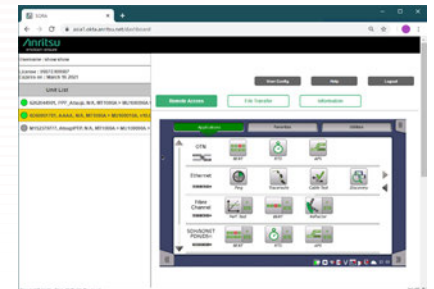
Site Over Remote Access MX109020A
Site Over Remote Access Connect MT1040A-011
Site Over Remote Access Connect MT1000A-011

Remote control via Cloud

- Supports remote control of MT1040A/MT1000A using general Web browser
- Supports simultaneous control of multiple MT1040A/MT1000A units
- Supports direct access using web browser to files saved in measuring instrument and copying of settings files saved at operation side to measuring instrument

The MX109020A software is the license to operate either the MT1040A or MT1000A via a Web browser.

Using the MX109020A installed in a PC supports remote operation of multiple MT1040A/MT1000A from a one PC. Additionally, when problems occur, direct remote operation of the measuring instrument by a skilled technician helps efficient troubleshooting.



Network Master™



Mainframe MT9090A
Gigabit Ethernet Module MU909060A1/A2/A3

Handheld Gigabit Ethernet Tester

- Lightweight and compact unit (approx. 800 g)
- Testing time reduced by the "Test Automator" creating a series of tests with pass/fail
- Automated ITU-T Y.1564 and RFC 2544 testing including bidirectional path analysis service
- Disruption time measurement ideal for testing VoIP and IPTV applications top talkers, network attacks and finding the route course of an issue by "Channel Stats"

The portable and easy-to-use MU909060A offers versatile measurement functions supports deployments and maintenances of Carrier Class Ethernet and LTE mobile backhaul networks.



PIM Master™

MW82119B Passive Intermodulation (PIM) Analyzer with Site Master™ Cable & Antenna Analyzer Option

Battery-Operated, High-Power, Portable PIM Analyzer with Cable & Antenna Analyzer

- Measurements: PIM vs. time, swept PIM, distance-to-PIM, noise floor, 2-port PIM hunting
- Antenna testing
- Battery operated: >3 hour
- 20 to 46 dBm (0.1 Watt to 40 Watt)
- Field-proven design: Rugged, compact, daylight viewable display
- Available 2-port PIM Master solution

The MW82119B is a 40 Watt, battery-operated PIM analyzer featuring Site Master line sweep capability. With the Site Master option included, the MW82119B is able to fully certify cable and antenna system performance and measure PIM, distance-to-PIM, return loss, VSWR, cable loss, and distance-to-fault with a single test instrument. The available 2-port PIM Master solution (Option 0703) for the LTE 700 band now allows technicians to send F1 and F2 CW tones through Bands 17 and 14 antennas simultaneously, with isolation performance of 25 dB between the two ports. Making testing and PIM hunting a FirstNet deployment more efficient. This versatile solution also works as a traditional 1-port LTE 700 PIM test set, ideal for finding PIM in cable and antenna systems and tap testing connectors.



Microwave Site Master™

S820E 1 MHz to 8/14/20/30/40 GHz

Cable & Antenna Analyzer

- VNA mode (option) offers fully reversing 4 S-parameter measurement capabilities
- VVM mode (option) with standard A/B and B/A ratio capability
- 110 dB of dynamic range from 20 MHz to 40 GHz
- 550 μ s/data point for fast field measurements
- Advanced and classic mode GUI (i.e., S810D/S820D)
- Coaxial and waveguide measurement supported

The S820E family, with frequency options covering 1 MHz to 8, 14, 20, 30, and 40 GHz, is the world's most advanced Site Master ever developed. Available vector network analyzer (VNA) and vector voltmeter (VVM) options allow users to easily expand the S820E's versatility at any time. Adding options is hassle free, simply purchase the desired option(s) and install the option activation key(s) provided by Anritsu. No need to send the instrument into a service department because all hardware and calibrations required are already built into the S820E before it leaves the factory.



LMR Master™

S412E Cable & Antenna Analyzer, Vector Network Analyzer: 500 kHz to 1.6 GHz, Spectrum Analyzer: 9 kHz to 1.6 GHz

Land Mobile Radio Modulation Analyzer, Signal Generator, Vector Network Analyzer, and Spectrum Analyzer

- Return loss, VSWR, insertion loss, S_{11}/S_{21} , DTF
- Cable and antenna analyzer: 500 kHz to 1.6 GHz, optional to 6 GHz
- LMR signal analyzers with coverage mapping: P25, P25 phase 2, NXDN, DMR (MotoTRBO), TETRA, PTC-ITCR, PTC-ACES, NFBM, FDD & TDD
- Broadband signal analyzers: LTE, WiMAX
- Interference analyzer with interference mapping and support for Handheld InterferenceHunter MA2700A
- PIM hunting

The S412E is the ideal instrument for land mobile radio (LMR) and professional mobile radio (PMR) technicians and engineers engaged in field testing the RF performance of NBFM, P25, P25 Phase 2 (TDMA), NXDN, DMR (MotoTRBO), TETRA and FDD & TDD LTE for commercial, public safety, maritime, and critical infrastructure radio systems. In addition, the LMR Master S412E offers support for USA class 1 railway Positive Train Control (PTC) systems.



Site Master™

S331E/S332E/S361E/S362E Cable and Antenna Analyzer: 2 MHz to 6 GHz, Spectrum Analyzer: 9 kHz to 6 GHz

Compact Handheld Cable and Antenna Analyzers with Spectrum Analyzer

- Return loss, VSWR, cable loss, distance-to-fault, Smith Chart, 1-port phase
- Field-proven design: four-hour battery life, rugged, compact, lightweight, daylight viewable display
- USB connectivity, built-in touchscreen keyboard
- Intuitive menu-driven touchscreen user interface
- Standard three-year warranty (battery one-year warranty)

The Site Master does all this while delivering the ease of use, rich functionality, and best-in-class price/performance you've come to expect from Anritsu. Designed to handle the most punishing field conditions, the S361E Site Master Cable and Antenna Analyzer dramatically enhances your productivity and transforms the traditional fix-after-failure maintenance model to one that identifies and fixes problems before major failures occur.



S331E

Site Master™

S331L 2 MHz to 4 GHz, Power Meter: 50 MHz to 4 GHz

Handheld Cable & Antenna Analyzer Featuring Classic and Advanced Modes

- 2 MHz to 4 GHz handheld cable and antenna analyzer, impact, dust, and splash resistant
- More than 8 hours of continuous battery operation
- Built-in InstaCal™ module with fast, one connection calibration
- FlexCal™ maintains calibration with frequency changes
- Built-in power meter
- 800 × 480 7-inch TFT touch-screen display and multiple USB ports with backlit keypad

The S331L is the highest value in a rugged, handheld cable and antenna analyzer. The S331L replaces the current value line S331D which is part of the longest running portable cable and antenna analyzer family in history. Utilizing the latest advancements in technology, the S331L has been optimized for field conditions, is easy to use, and has efficient sweep management capabilities. The S331L delivers an entire workday of battery operating time, the most ever offered in a handheld cable and antenna analyzer. With its large outdoor viewable 7" TFT touch screen display, new intuitive GUI, and classic mode that mimic the S331D basic measurement flow, the S331L is very easy to use, and can significantly increase a user's efficiency in the field.



Site Master™

S331P Ultraportable cable & antenna analyzer: 150 kHz to 6 GHz

Ultraportable Cable & Antenna Analyzer Featuring Classic and Advanced Modes

- Smallest, lightest, and fastest Site Master
- Direct connection to DUTs eliminating the need for phase-stable cables
- Powered through USB interface (no battery required)
- Rugged and reliable
- Impact, dust, and splash resistant
- Compatible with Anritsu software tools including easyTest™ Tools
- Factory default 1-Port ReadyCal (automatically applied to all measurements except Transmission)

The S331P is an ultraportable version of the industry-leading Site Master series of cable and antenna analyzers. It is the smallest, lightest, fastest, and most cost-effective instrument in the Site Master family. No battery is required since the USB port of Windows 7, 8 and 10 tablet devices, laptops, or desktop PCs power it. Available with two frequency ranges it is the only small, headless Site Master product capable of measurements down to 150 kHz for low frequency radio communications applications and up to 6 GHz for higher frequency applications like LTE-U in the 5 GHz unlicensed spectrum.



Field Master™

MS2070A 9 kHz to 3 GHz

Handheld RF Spectrum Analyzer

- Spectrum analyzer: 9 kHz to 3 GHz
- Interference analyzer with interference mapping and eCompass handle
- Spectrogram display for detection and recording of interfering signals
- Smart measurements including channel power and occupied bandwidth
- USB power sensor support for precise transmitter power measurements
- AM/FM demodulation with audio output for signal identification



The MS2070A from Anritsu offers an unrivalled combination of performance and features for standard spectrum analysis to 3 GHz. It builds on Anritsu's experience of developing handheld instruments that delivers in both field and laboratory environments. The large 10-inch high resolution multi-touch screen presents results and instrument configuration in a clear and easy to use style. At under 4 kg weight, with the integrated battery typically providing three hours of operation all in a convenient soft carry case, it is ideal for measurements in the field.

Key applications include HF, VHF, UHF transmitter measurements, interference hunting, EMI/EMC pre-compliance testing and PIM hunting.

Field Master™

MS2080A 9 kHz to 4 GHz

Handheld RF Spectrum Analyzer

- Spectrum analyzer: 9 kHz to 4 GHz
- Fast sweep speeds of 45 GHz per second
- Real Time Spectrum Analyzer (RTSA) with 40 MHz bandwidth
- Cable and antenna analyzer with addition of S331P Site Master
- LTE FDD/TDD analyzer with modulation quality
- 5G NR FR1 analyzer including support for DSS
- Interference analyzer with interference mapping and eCompass handle
- USB power sensor support for precise transmitter power measurements
- AM/FM demodulation with audio output for signal identification



The MS2080A is a spectrum analyzer that integrates RF field technician's most commonly used instruments into a single package. That means less to carry and a single user interface to learn, making time in the field more productive. Integrating a high performance spectrum analyzer with RTSA, interference analyzer tools, LTE/5G NR transmitter analysis and cable and antenna line sweep measurements the MS2080A addresses the full complement of the RF field technicians requirements. Designed to withstand the knocks and blows inevitable when working at remote transmitter sites. Weighing less than 4 kg, the MS2080A is small, compact, and easy to carry. An optional shoulder harness attaches to the supplied soft case to ease long-term use outdoors, especially with over six hours of continuous operation when adding the extended power pack. An environmental rating of IP52 in the soft case protects the instrument from dust and water, ensuring it is always ready to make the measurements you need in the location you need them.

Field Master Pro™

MS2090A 9 kHz to 9/14/20/26.5/32/43.5/54 GHz

Compact and Ruggedized for Field Use

- DANL: -164 dBm (with preamp)
- TOI: +20 dBm (typical)
- Analysis bandwidth: 110 MHz
- Amp range: DANL to +30 dBm
- Phase noise at 1 GHz: -110 dBc/Hz @ 100 kHz offset (typical)
- Demodulation: 5G NR, LTE FDD, RF, and modulation quality plus SSB signal analysis
- Resolution bandwidth (RBW): 1 Hz to 10 MHz
- RTSA bandwidth: 22, 55, 110 MHz (option dependent)
- Amplitude accuracy: <math><14\text{ GHz } \pm 1.3\text{ dB } (\pm 0.5\text{ dB, typical})</math>
- Zero span with 60 ns minimum span
- IQ capture and streaming



The MS2090A real-time spectrum analyzer delivers performance never previously available in a compact, handheld instrument. With continuous frequency coverage from 9 kHz to 54 GHz, the Field Master Pro MS2090A is specifically designed to meet the test challenges of a full range of other wireless technologies in use today, including: 5G, LTE, wireless backhaul, aerospace/defense, satellite systems, and radar.

Spectrum Master™

MS2713E 9 kHz to 6 GHz

Compact Handheld Spectrum Analyzer

- Spectrum analyzer: 9 kHz to 6 GHz
- Interference analyzer with interference mapping
- High-accuracy power meter, 2-port transmission measurements
- Coverage mapping, Channel scanner, GPS, AM/FM/PM analyzer
- 3GPP, 3GPP2, WiMAX, ISDB-T, DVB-T/H signal analyzers
- Tracking generator: 500 kHz to 6 GHz



Regulatory requirements are growing. You're under increasing pressure to cut costs. And improving system uptime is always a top priority. The MS2713E helps you do all of this and more. Whether you are performing complex interference analysis or assessing signal quality, the MS2713E delivers the ease of use, rich functionality, and best-in-class price/performance you've come to expect from Anritsu. Designed to handle the most punishing field conditions, the MS2713E allows you to monitor, locate, identify, and analyze a broad range of cellular, 2G/3G/4G, land mobile radio, Wi-Fi, and broadcast signals. With a rich array of configuration options, the multifunctional MS2713E eliminates the need for you to learn and carry multiple instruments when locating and identifying signals over wide frequency ranges.

Spectrum Master™

MS2720T 9 kHz to 9 GHz/13 GHz/20 GHz

High-Performance Handheld Spectrum Analyzer

- Frequency Ranges: 9 kHz to 9 GHz, 13 GHz, and 20 GHz
- Broadband preamplifiers over the whole frequency range for increased sensitivity approx. 17 dB
- Three sweep modes: improved sweep speed, up to 100 times faster
- Resolution and video bandwidths from 1 Hz to 10 MHz
- New triggering choices including hysteresis, hold-off, and delay
- More zero-span capabilities including 10 MHz RBW & VBW
- Enhanced spectrum analyzer touchscreen GUI including large marker display choice
- Choice of display options for readability: normal, black on white, night vision, color on white, or high contrast
- On-screen interference mapping as part of the interference analysis option



The MS2720T represents one of the company's highest performance handheld spectrum analyzer. Exciting new features and options bring more value and speed to the user. The MS2720T features over 30 analyzers in one to meet virtually every measurement need.

Remote Spectrum Monitor

MS27101A/MS27102A/MS27103A/MS27201A 9 kHz to 43.5 GHz

For Remote RF Signal Monitoring

- Frequency coverage: 9 kHz to 43.5 GHz
- Sweep speed up to 24 GHz/s
- Integrated web server to view, control and conduct measurements via web browser for MS2710xA family and a Windows-based PC GUI application for the MS27201A
- Hardware watchdog timer to insure long-term stability for remotely deployed monitors
- Low spurious levels for accurate signal discovery
- Up to 110 MHz analysis bandwidth



Our four models of remote spectrum monitoring products are designed to both mitigate interference problems and to identify illegal or unlicensed signal activity. The MS27101A is housed in a 1/2 rack enclosure with 1U height, designed exclusively for indoor applications. MS27102A is an IP67 rated device which operates outdoors, with the ability to be mounted on poles or walls (using the included mounting bracket). The MS27103A is a multi-port spectrum monitor (12 RF In ports or optionally 24 RF In ports) which is ideal for cellular, DAS and other applications requiring the use of multiple antennas. The MS27201A is built for the most demanding spectrum monitoring tasks by extending the frequency range to 43.5 GHz and up to 110 MHz analysis bandwidth. The MS27201A packs 5G and LTE analysis, IQ capture and streaming, all in a 2U enclosure.

VNA Master™

MS2036C 5 kHz to 9 GHz

The Ultimate Handheld VNA Master with a Spectrum Analyzer

VNA Master

- True 2-Path 2-Port Vector Network Analyzer
- Ultimate accuracy with 12-term error correction algorithm
- User-defined Quad Display for viewing all 4 S-parameters Spectrum Analyzer: 9 kHz to 9 GHz
- Detectors: Peak, Negative, Sample, Quasi-peak, and True-RMS
- Markers: 6, each with a delta marker, or 1 reference with 6 deltas
- Built-in pre-selector for eliminating spurious in displays

The Anritsu VNA Master MS2036C is the industry's highest performance, handheld solution for 2-port, 2-path measurements, anytime, anywhere. It specifically addresses complex coaxial or waveguide measurement needs in the field with accurate, vector corrected 2-port magnitude, phase, and standard distance-to-fault (DTF) measurements (requires firmware V1.16 or higher).



VNA Master™

MS202xB/MS203xB series Vector Network Analyzer: 500 kHz to 6 GHz, Spectrum Analyzer: 9 kHz to 6 GHz

Affordable, Portable, Powerful Handheld High Performance S-Parameters

- 1 path, 2-port vector network analyzer: 500 kHz to 4 or 6 GHz
- Spectrum analyzer: 9 kHz to 4 GHz or 6 GHz
- Fast 850 μ s/data point sweep speed with arbitrary data point up to 4001
- Interference Analyzer: Spectrogram, Signal Strength, RSSI, Signal ID
- Dynamic Range: > 95 dB in 10 Hz RBW
- -162 DANL in 1 Hz RBW (normalized)

Anritsu proudly offers the MS202xB/MS203xB VNA Master + Spectrum Analyzer, the industry's most affordable and compact handheld solution to address cable, antenna, component, and signal analysis needs in the field. All MS202xB/3xB VNA Master models offer benchtop accuracy and high performance S-parameter measurements in portable form. With frequency coverage from 500 kHz up to 4 or 6 GHz in a truly handheld, battery-operated, rugged, multi-function instrument, the VNA Master also provides a field-friendly touchscreen user interface.



MS2035B

Microwave CW USB Power Sensors

MA24300A series (MA24330A/340A/350A) 10 MHz to 50 GHz

Fast, Accurate Average Power Measurements

- Frequency range from 10 MHz to 50 GHz over 90 dB of dynamic range
- Power measurement range: +20 to -70 dBm
- CW average power measurements
- Fast measurement speed: >2,100 readings/s continuous, >5,600 readings/s buffered
- NIST traceable calibrations
- Silicone protective covering for additional field durability



The MA24300A power sensor family is designed to provide fast, accurate average power measurements from 10 MHz to 50 GHz over 90 dB of dynamic range. The sensor employs high-performance digital processing that enables measurement speeds of >2,100 continuous power readings/s and >5,600 buffered readings/s. A unique, low noise design eliminates the need to zero the sensor before taking measurements for most applications. The sensors have internal and external triggering capability that facilitates time-based measurements and the use of list mode to speed up automated processes. The sensor can be controlled with a PC via remote programming commands or with PowerXpert™, a free software application. These sensors are also compatible with most Anritsu RF and microwave handheld instruments.

USB Peak Power Sensors

MA24400A series (MA24406A/08A/18A/40A/41A) 50 MHz to 40 GHz

Meeting the Wireless Communications Challenges of Signal Measurement and Characterization

- 6, 8, 18, and 40 GHz models
- Up to 195 MHz VBW and 3 ns rise time
- 100,000 measurements per second
- Real-time processing of power readings
- 100 MS/s continuous and 10 GS/s effective sampling rates
- 100 ps time resolution for rising/falling edge measurements
- Full pulse profiling
- Crest factor, CCDF, and statistical measurements



With industry-leading rise time and video bandwidth (VBW) of up to 195 MHz (sensor dependent), Anritsu's USB peak power sensors are able to measure the peak power of wideband modulated signals, like 802.11ac, as well as pulses as narrow as 10 ns. The MA24400A family also takes measurement speed and resolution to a new level. Other peak power sensors halt measurements while processing captured data. With real-time processing of power readings, these sensors never miss a signal. Sampling rates of 100 megasamples per second continuous and 10 gigasamples per second effective provides best-in-class time resolution of 100 ps and the ability to measure 3 ns rise time. This means that even the smallest change in the signal will be caught and plotted for a full picture of signal behavior.


Power Master™

MA24507A/MA24510A

Frequency Selectable millimeter-wave (mmWave) Power Analyzer that measures the RF power of a signal and is powered by USB

- Low power capability to measure signals as low as -90 dBm
- Excellent for over-the-air testing, especially with mmWave signals that have high propagation loss
- User settings to control measurement speeds and noise floor
- Channel Monitor mode in PowerXpert for monitoring up to six frequency channels at once
- Power Hunter mode in PowerXpert for searching up to six signals within a frequency range
- Mounting holes for direct mounting to connect probes for OTA or on-wafer testing

Power Master is an ultraportable, USB-powered mmWave power analyzer that enables simple, numeric, frequency-based measurement of RF power from 9 kHz to 110 GHz and as low as -90 dBm. Traditional power meters are broadband and have limited power ranges, so engineers and technicians are using spectrum analyzers that include many unneeded features, cost hundreds of thousands of dollars, and take up half the test bench just to make simple, frequency-based RF amplitude measurements. The Power Master series enables those measurements in a USB-powered device slightly bigger than a smartphone and at a fraction of the price of a spectrum analyzer.

only MS24507A 



Inline Peak Power Sensor

MA24105A 350 MHz to 4 GHz

A Standalone, Compact, and Highly Accurate Bi-Directional Inline Peak Power Sensor

- Broad frequency range: 350 MHz to 4 GHz
- Covers all major cellular and communication bands, such as WLL, GSM/EDGE, CDMA/EV-DO, W-CDMA/HSDPA, WiMAX and TD-SCDMA
- Forward and reverse measurements
- Widest dynamic range inline power sensor in its class
- True-RMS measurements to 150 W
- Standalone, Low cost, Plug and Play device
- Ideal for High Crest Factor Signal Measurements



The MA24105A is designed to take accurate average power measurements over 2 mW to 150 W, from 350 MHz to 4 GHz. The sensor employs a "dual path" architecture that enables True-RMS measurements over the entire frequency and dynamic range allowing users to measure CW, multi-tone and digitally modulated signals such as GSM/EDGE, CDMA/EV-DO, W-CDMA/HSDPA, WiMAX, and TD-SCDMA. The forward direction path also includes a 4 MHz bandwidth channel that has peak and comparator/integrator circuits that add measurement functions such as PEP power, crest factor, CCDF, and burst average power. Another detection circuit on the reverse direction adds reverse power measurement capabilities including reverse power, reflection coefficient, return-loss, and SWR. The presence of a micro-controller along with signal conditioning circuitry, ADC, and power supply in the sensor makes it a complete miniature power meter.

USB Power Sensor

MA24106A True-RMS, 50 MHz to 6 GHz

Handy, Highly Accurate, and Reliable USB Sensor for RF Power Measurement

- True-RMS measurements over 63 dB dynamic range enables accurate CW and modulated power measurements
- Ready for use in a wide variety of applications, including installation and maintenance of base stations, testing of 3G/4G devices, cell phones, and general purpose RF devices
- High damage power levels and ESD protection circuitry showcases ruggedness and reliability
- Low power consumption (100 mA, typ.) extends laptop battery life
- Worldwide calibration and service centers ensure reduced downtime and local support



The MA24106A is a USB power sensor that eliminates the need of a traditional power meter. It is a highly accurate, standalone instrument that communicates with a PC via USB. The power measurement capability of MA24106A is intended to mimic that of a traditional thermal (thermo-electric) power sensor with a wider dynamic range.

Microwave USB Power Sensor

MA24108A/MA24118A/MA24126A 10 MHz to 8 GHz/18 GHz/26 GHz

Low-Cost, Compact, and Highly Accurate Power Sensors for RF and Microwave Applications

- Broad frequency range: 10 MHz to 8 GHz (MA24108A)/18 GHz (MA24118A)/26 GHz (MA24126A)
- True-RMS measurements
- NIST traceable calibration
- Built-in internal and external trigger (only used with PC)
- High power handling (+33 dBm)
- 1 mW calibration need eliminated
- Silicone protective covering for additional field durability



The MA24108A/MA24118A/MA24126A are designed to provide accurate average power measurements from 10 MHz to 8 GHz/18 GHz/26 GHz over 60 dB of dynamic range. These sensors employ a "dual path" architecture that provides (similar to thermal sensor) True-RMS measurements over the entire frequency and dynamic range, enabling users to make highly accurate average power measurements for CW, multi-tone, and digitally modulated signal up to 26 GHz. The sensors have internal and external triggering capability that facilitates individual slot power measurements of TDMA waveforms as well as burst power measurements of periodic and non-periodic waveforms.

Microwave Universal USB Power Sensor

MA24208A/MA24218A 10 MHz to 8 GHz/18 GHz

Low-Cost, Compact, and Highly Accurate Power Sensors for RF and Microwave Applications

- Frequency range: 10 MHz to 8 GHz (MA24208A)/18 GHz (MA24218A)
- Power measurement range: +20 to -60 dBm
- True-RMS measurements (modulation independent)
- Fast measurement speed: >1,600 readings/s continuous, >11,000 readings/s buffered
- Able to accept high power levels before being damaged: +30 dBm (CW), +34 dBm (peak <10 μs)
- No zero required
- NIST traceable calibrations (MA24218A)



The MA24208A and MA24218A are designed to provide fast, accurate average power measurements from 10 MHz to 8 GHz/18 GHz over 80 dB of dynamic range. These sensors employ a patented "triple path" architecture that provides True-RMS measurements (similar to thermal sensors) over the entire frequency and dynamic range, enabling users to make highly accurate average power measurements for CW, multi-tone, and digitally modulated signal up to 18 GHz. These sensors employ high-performance digital processing that enables best-in-class measurements speeds, including >1,600 continuous power readings/s continuous and >11,000 buffered readings/s.

• United States

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