Product Brochure

Anritsu

Reliable.
Powerful.
Trusted.

RF and Microwave Instruments

Spectrum Analyzers

Model	Frequency	RBW	Noise Level	Key Features
MS2661C	9 kHz to 3 GHz	30 Hz	–130 dBm	■ Frequency counter ■ C/N ■ Adjacent channel power ■ Occupied-frequency bandwidth ■ Burst average power ■ Noise power ■ PASS/FAIL limit lines
MS2663C	9 kHz to 8.1 GHz	30 Hz	–130 dBm	
MS2665C	9 kHz to 21.2 GHz	30 Hz	–130 dBm	■ Compact, lightweight (13 kg standard) ■ High C/N and superior distortion characteristics ■ Easy-to-use operation ■ Options support wide range of applications ■ MS2665C supports easy set up auto measurements ■ MS2667/68C supports millimeter applications
MS2667C	9 kHz to 30 GHz	10 Hz	–135 dBm	
MS2668C	9 kHz to 40 GHz	10 Hz	–135 dBm	
MS2681A	9 kHz to 3 GHz	1 Hz to 20 MHz	Down to –148.3 dBm (option and frequency dependent)	■ Fast data transmission speed (GPIB transmission speed:120 kbytes/second) ■ Optional measurement software for high-speed modulation analysis (1.5 seconds with W-CDMA, 0.5 seconds with IEEE 802.11a) ■ Optional narrow resolution bandwidth from 1 Hz
MS2683A	9 kHz to 7.8 GHz	1 Hz to 20 MHz	Down to –146.5 dBm (option and frequency dependent)	
MS2687B	9 kHz to 30 GHz	1 Hz to 20 MHz	Down to –146.5 dBm (option and frequency dependent)	■ Optional measurement software for high-speed modulation analysis (0.5 seconds with IEEE 802.11a) ■ Optional power meter that measures up to 32 GHz ■ Fast data transmission speed (GPIB transmission speed:120 kbytes/second)
MS2717B NEW! MS2718B NEW! MS2719B NEW! Economy Microwave Spectrum Analyzers	9 kHz to 7.1 GHz 9 kHz to 13 GHz 9 kHz to 20 GHz	1 Hz to 3 MHz	–153 dBm typical to 1 GHz	■ Typical dynamic range of 100 dB ■ Typical phase noise of –110 dBc/Hz at 10 kHz offsets up to 6 GHz ■ W-CDMA/HSDPA RF measurements ■ Demodulate W-CDMA signals and display code domain power, error vector magnitude, codogram and modulation summary
MS2781B Signature™ High-Performance Signal Analyzer	100 Hz to 8 GHz	0.1 Hz to 8 MHz	–167 dBm	■ Excellent measurement performance ■ Fully functional and upgradable built-in PC with a Windows® XP GUI™ ■ Compatibility with simulation tools, such as MATLAB® and Simulink®
MS8608A Digital Mobile Radio Transmitter Tester	9 kHz to 7.8 GHz	1 Hz to 20 MHz	Down to –146.5 dBm (option and frequency dependent)	■ Excellent performance for evaluating W-CDMA modulation signals ■ Supports GSM/EDGE, HSDPA, WLAN/802.11, CDMA, 1xEVDO, and Pi/4DQPSK (PHS, PDC, IS–136) measurements ■ Resolution bandwidth of up to 20 MHz via built-in spectrum analyzer ■ Power can be measured with an accuracy of ±0.4 dB using the power sensor
MS8609A Digital Mobile Radio Transmitter Tester	9 kHz to 13.2 GHz			

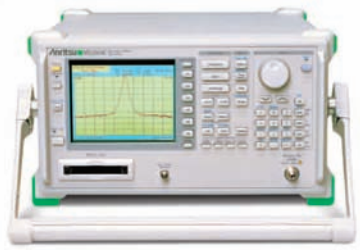
Take advantage of a large selection of options
to handle a wider range of applications at a reasonable cost.

MS2719B

Spectrum Analyzers

Superior performance. Advanced capabilities. Affordable pricing. The Anritsu family of spectrum analyzers delivers high frequency/level accuracies and a broad set of smart, intuitive features—including models with built-in one-button measurements.

MS2661C



MS2668C

Vector Network Analyzers

Vector Network Analyzer	Frequency	Key Features	Target Applications
37000D Series Lightning Family Microwave and Millimeter Wave VNA	40 MHz to 110 GHz (expandable to 500 GHz)	■ Flexible test port configuration ■ Multiple upgrade paths ■ High stability and reliability ■ Powerful VNA utilities software ■ Multiple port solutions ■ AutoCal automated calibration	■ Microwave and millimeter wave component test ■ On-wafer ■ Waveguide S-parameter ■ Multi-port device and balanced differential ■ R&D and production environments
37200D Series Lightning for Passive Device Testing	40 MHz to 67 GHz	■ Accurate, fast measurements of passive devices ■ High power and wide dynamic range ■ Multiple source control and frequency offset for frequency conversion devices ■ Calibration utility for mixer measurements	■ E/O (modulators) and O/E (photodiodes, receivers) component measurement capability ■ Automatic de-embedded mixer ■ Embed/De-embed application ■ Materials measurements of dielectric properties
37300D Series Lightning for Active Device Testing	40 MHz to 67 GHz	■ Internal bias tees ■ Extended power range (source step attenuator and test port attenuator) ■ Gain compression application	■ Amplifier ■ Device characterization ■ On-wafer
ME7808C Lightning Broadband and MMWave VNA	40 MHz to 110 GHz Coax Up to 500 GHz in waveguide bands	■ Continuous broadband frequency coverage from 40 MHz to 110 GHz in W1 (1 mm) coaxial output ■ Supports on-wafer device characterization, broadband coaxial and waveguide measurements	■ Broadband characterization ■ Parameter extraction ■ Device modeling ■ Millimeter wave
MS462XA Series Scorpion RF Transmission/ Reflection Analyzer	10 MHz to 9 GHz	■ Fast, accurate and repeatable 1-path, 2-port S-parameter measurements	■ Passive 2-port handset components, such as filters
MS462XB Series Scorpion RF VNMS	10 MHz to 9 GHz	■ Industry's best 2- and 3-port test for active devices delivers superior accuracy	■ Handset components such as duplexers, amplifiers, and mixers
MS462XC Series Scorpion RF Direct Receiver	10 MHz to 9 GHz	■ Direct access to receivers for flexibility and versatility	■ Antennas, mixers, power amplifiers and other multi-port devices
MS462XD Series Scorpion RF 4-port VNMS Configuration	10 MHz to 9 GHz	■ Converts S-parameters into real-time differential and common-mode analysis ■ Most popular configuration for functionality, performance and value	■ Most wireless components and emerging balanced devices
MS4630B RF VNA	10 Hz to 300 MHz	■ Accurate magnitude and phase measurements ■ Filter and resonator analysis functions ■ High-speed device evaluation	■ Passive filters, resonators for both R&D and manufacturing ■ Optimized for IF measurements

37397D

ME7808C

The versatility to completely characterize wireless components and systems.

Vector Network Analyzers

Anritsu VNAs encompass a wide range of high-performance, component test tools designed to address the growing needs of defense, satellite, radar, broad-band communication and optoelectronic component markets. Choose the Lightning family for troubleshooting any active or passive device measurements—from characterization and designing to manufacturing and verification. And for RF frequency applications, the Scorpion® series provides excellent transmission/reflection, balanced/differential and S-parameter measurement solutions.

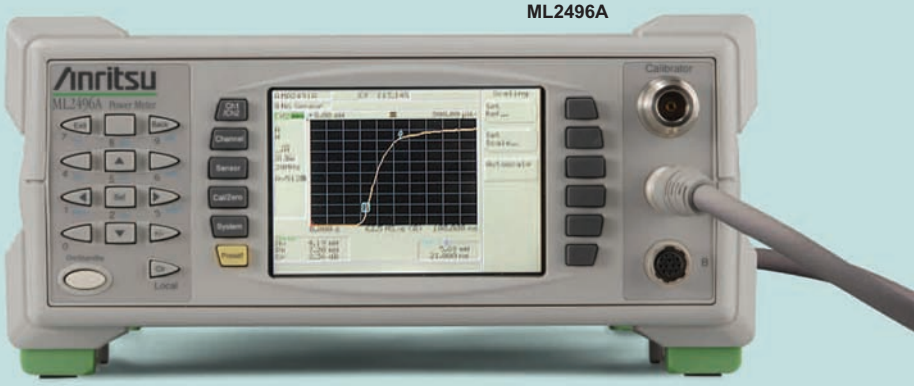
37397D Lightning VNA with 65 GHz Multiport Test Set

Power Meters | Signal Analyzers

Power Meters (RF Microwave)

Anritsu power meters provide accurate measurements for the full range of communications, wireless and aerospace applications.

ML2496A

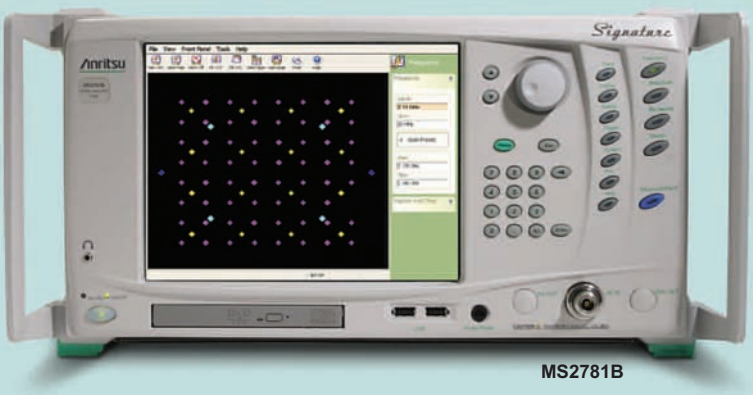


Power Meter	Frequency	VBW	Dynamic Range (dBm)	Channels
ML2437A Power Meter	100 kHz to 65 GHz Sensor dependent	100 kHz	–70 to +20 dBm Sensor dependent	1
ML2438A Power Meter		100 kHz		2
ML2487A Wideband Peak Power Meter		20 MHz		1
ML2488A Wideband Peak Power Meter		20 MHz		2
ML2495A Wideband Peak Power Meter		65 MHz		1
ML2496A Wideband Peak Power Meter		65 MHz		2
ML2530A Calibration Receiver	100 kHz to 3 GHz	100 kHz	Range dependent	1

The preferred choice of service providers, network operators and contractors **worldwide.**

Signal Analyzers

Technicians looking for exceptional engineering insight for advanced RF and communications products need to look no further. Anritsu Signal Analyzers offer cost-effective solutions with integrated fixed and mobile WiMax measurements, industry-best DANL and dynamic range and comprehensive W-CDMA/HSDPA measurements.



MS2781B

Signal Analyzer	Frequency	RBW	Noise Level	Key Features
MS2781B Signature™	100 Hz to 8 GHz	0.1 Hz to 8 MHz	–167 dBm	■ Excellent measurement performance ■ Fully functional and upgradable built-in PC with a Windows® XP GUI ■ Compatibility with simulation tools, such as MATLAB® and Simulink®

▶ Take a closer look at Power Meters and Signal Analyzers at www.anritsu.us/family

Anritsu provides the best

synthesized signal generator solutions.

MG37020A

Synthesized Signal Generators

Whether you test in the microwave, fixed or mobile satellite communications or defense industries, Anritsu provides the best synthesized signal generator solutions. With high-signal purity, low noise and excellent frequency stability, our signal generators are a fundamental measuring instrument for your lab or manufacturing site. Choose instruments with a full range of modulation capabilities for signal simulations from simple to the most complex, including Amplitude (AM), Frequency (FM), Phase (ϕ) and Pulse (PM). Plus, you'll find a series of configurable and upgradable broadband high-performance signal generators that meet your exact specifications.

Signal Generator	Frequency Range	Key Features	Key Applications
MG3633A Synthesized Signal Generator	10 kHz to 2700 MHz	■ High-performance ■ Analog modulation ■ Super low phase noise	■ Mobile communication
MG3641A Synthesized Signal Generator	125 kHz to 1040 MHz	■ 0.01 Hz resolution ■ –100 dBc non-harmonic spurious	■ Radio receiver interference testing ■ On-site maintenance ■ R&D
MG3642A Synthesized Signal Generator	125 kHz to 2080 MHz	■ 0.01 Hz resolution ■ –100 dBc non-harmonic spurious	■ Radio receiver interference testing ■ On-site maintenance ■ R&D
MG3681A Digital Modulation Signal Generator	250 kHz to 3000 MHz	■ Broadband vector modulation ■ Excellent ACPR ■ Analog modulation	■ 3GPP applications ■ All major mobile and communication applications ■ HSDPA
MG3690B Series RF/Microwave Signal Generator	0.1 Hz to 67 GHz/325 GHz and greater	■ High-performance ■ High-output power ■ Ultra-low phase noise ■ Analog/Pulse modulation	■ Microwave communications ■ Aerospace/defense ■ Applications signal simulation ■ Manufacturing ATE systems
MG37020A Fast Switching Microwave Signal Generator	10 MHz to 20 GHz	■ Fast Switching Speed ■ High-output power ■ Low phase noise ■ Pulse modulation	■ Microwave communications ■ Aerospace/defense ■ Applications signal simulation ■ Manufacturing ATE systems
MG3700A Vector Signal Generator	250 kHz to 3 GHz (6 GHz option)	■ 160 MHz arbitrary waveform generator yields high-level accuracy and large capacity baseband memory	■ Digital modulation of signals for all major wireless communication systems
MG442A Synthesized Level Generator	10 Hz to 20/30 MHz	■ High-precision ■ Balanced and unbalanced	■ Telecommunications
MG724E1/G1 Signal Generator	6.3 to 7.8 GHz 12 to 13 GHz	■ Compact high-performance	■ Line repeater ■ Maintenance

Handheld Solutions

Don't let their size fool you. These rugged, lightweight and easy-to-use instruments deliver powerful, field-tested, lab-approved reliability and accuracy to the palm of your hand—and to wherever there's microwave or communication systems issues.

S332D

Delivering benchtop performance
in a handheld instrument.

Handheld Cable and Antenna Analyzer: Site Master

As powerful as it is easy to use, more field technicians choose Site Master than any other handheld analyzer. And for applications as VHF, broadcasting, paging, Land Mobile Radio, cellular, GPS, PCS/GSM, 2.5G, 3G, WLAN and WiMAX, Site Master delivers accurate, repeatable measurements.

Site Master	Frequency	Measurements
S311D Cable and Antenna Analyzer	2 MHz to 1600 MHz	■ Return Loss ■ SWR ■ Cable Loss ■ Distance-To-Fault
S331D Cable and Antenna Analyzer	2 MHz to 6000 MHz	
S251C Cable and Antenna Analyzer	625 MHz to 2500 MHz	■ Gain/Insertion Loss ■ Return Loss/SWR ■ Cable Loss ■ Distance-To-Fault ■ RF Source
S312D Cable and Antenna Analyzer	2 MHz to 1600 MHz cable and antenna analyzer, 100 kHz to 1.6 GHz spectrum analyzer	■ Return Loss ■ Channel Power ■ SWR ■ Field strength ■ Cable Loss ■ Interference Analysis ■ Distance-To-Fault ■ Occupied Bandwidth ■ Transmission Measurement ■ Adjacent Channel Power Ratio
S332D Cable and Antenna Analyzer	2 MHz to 6000 MHz cable and antenna analyzer, 100 kHz to 3 GHz spectrum analyzer	
S810D Broadband Microwave Transmission Line and Antenna Analyzer	2 MHz to 10.5 GHz	■ Return Loss ■ Distance-To-Fault ■ 1-port Cable Loss ■ 2-port Cable Loss ■ Coax and waveguide VSWR
S820D Broadband Microwave Transmission Line and Antenna Analyzer	2 MHz to 20 GHz	


MT8222A


MT8212B

Quickly and easily perform all measurements for wireless network deployment, installation and maintenance.

Handheld Base Station Analyzers: BTS Master and Cell Master

BTS Master™ is like having multiple tools in one compact instrument. You get the functionality of a transmitter analyzer (W-CDMA/HSDPA, GSM/GPRS/EDGE, WiMax), plus all the features of the field-proven Spectrum Master.

Cell Master eliminates the need to carry, manage and learn multiple test sets. It includes a transmitter analyzer (GSM, CDMA, cdmaOne, CDMA2000 1xRTT, and CDMA2000 1xEV-DO), a transmission analyzer for 2-port devices, interference analyzer, channel scanner, GPS receiver, CW signal generator (tests LNAs, repeaters or base station receiver sensitivity) and T1/E1 analyzer.

Base Station Analyzer	Frequency	Measurements
BTS Master MT8222A	■ 10 MHz to 6 GHz (Built-in cable and antenna analyzer) ■ 100kHz to 7.1 GHz (Built-in spectrum analyzer) ■ 10 MHz to 7.1 GHz (Built-in power meter)	■ Spectrum analysis ■ Interference analysis ■ Cable Loss ■ Mobile WiMAX (802.16-2005) ■ Fixed WiMAX (802.16–2004) ■ W-CDMA/HSDPA code domain power ■ Channel scanner ■ Return Loss ■ GSM/EDGE channel power ■ Distance-To-Fault ■ GPS receiver ■ CDMA/EVDO measurements
Cell Master MT8212B	■ 25 MHz to 4 GHz (Built-in cable and antenna analyzer) ■ 100 kHz to 3 GHz (Built-in spectrum analyzer) ■ 4.5 MHz to 3.0 GHz (Built-in power meter)	■ Return Loss ■ Distance-To-Fault ■ Interference analyzer ■ Transmitter measurements (cdmaOne, CDMA2000 1xRTT, CDMA2000 1xEV-DO, GSM, iDEN) ■ Cable Loss ■ Channel scanner ■ GPS receiver ■ T1/E1 analyzer ■ Transmission analyzer for 2-port devices

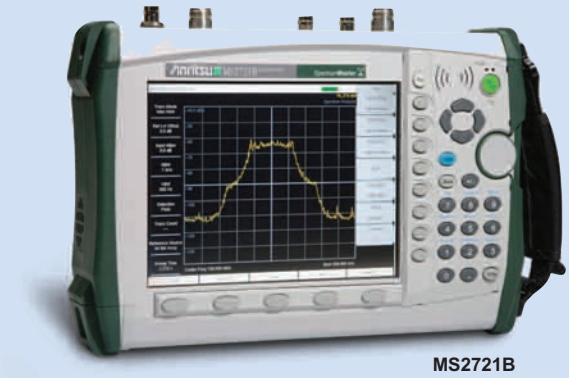
Handheld Solutions

MS2026A

Handheld Vector Network Analyzers: VNA Master

Need unparalleled performance and essential RF capabilities at modest prices? Enter the VNA Master series—simply the most advanced ultra-portable handheld VNAs on the market.

VNA Master	VNA Frequency	SPA Frequency	Measurements
MS2024A	2 MHz to 4 GHz	—	■ Return Loss ■ Cable Loss ■ VSWR ■ 1-port phase ■ 2-port phase ■ Smith chart ■ 2-port gain ■ Distance-To-Fault
MS2026A	2 MHz to 6 GHz	—	
MS2034A	2 MHz to 4 GHz	100 kHz to 4 GHz	MS2024A measurements plus: ■ High-performance spectrum analysis ■ Channel scanner ■ Interference analysis
MS2036A	2 MHz to 6 GHz	100 kHz to 7.1 GHz	



MS2721B

Handheld Spectrum Analyzers: Spectrum Master

As the de facto industry standard, the Spectrum Master™ series provides ultimate measurement flexibility in a lightweight, rugged package for field environments and mobile applications. With frequencies ranging from 9 kHz to 20 GHz, the Spectrum Master is ideal for such applications as identifying sources of interference, measuring field strength of cellular, satellite and military land mobile signals, field analysis of 802.11a/b/g wireless LAN signals and measurement of RF output from circuits, devices and instruments.

Spectrum Master	Frequency	RBW	Noise Level (dBm)
MS2711B	100 kHz to 3 GHz	10 kHz to 1 MHz	–115 dBm
MS2711D	100 kHz to 3 GHz	100 Hz to 1 MHz	–135 dBm
MS2721B	9 kHz to 7.1 GHz	1 Hz to 3 MHz	–163 dBm typical to 1 GHz in 1 Hz RBW
MS2723B	9 kHz to 13 GHz	1 Hz to 3 MHz	–156 dBm to 1 GHz, 1 Hz RBW –139 dBm to 3 GHz, 1 Hz RBW
MS2724B	9 kHz to 20 GHz	1 Hz to 3 MHz	–156 dBm to 1 GHz, 1 Hz RBW –136 dBm to 18 GHz, 1 Hz RBW

Specialized Products

Frequency Counters

Anritsu's frequency counters provide the most comprehensive frequency measurements in the industry.

Frequency Counter	Frequency	Key Features	Key Applications
MF2400 Microwave Frequency Counter	10 Hz to 20/27/40 GHz	■ Wideband measurement ■ High-accuracy burst measurement ■ Analog display function ■ Template function ■ High-speed transient measurement ■ Gating function	■ Mobile radio communications devices and circuits ■ Carrier frequency and pulse width of burst signal

Instrumentation Grade Attenuators

Highly accurate, versatile and economical, Anritsu Instrumentation Grade Attenuators also provide GPIB standard and feature automatic measuring system components.

Grade Attenuators	Frequency	Key Features	Key Applications
MN63A/65A/72A/64B Programmable Attenuator	DC to 18 GHz	■ Wide frequency range ■ High accuracy ■ Long operating life ■ High-speed switching	■ R&D ■ Inspection ■ Production

Precision Components, Precision Measurements

Technicians rely on Anritsu for industry-leading design and production of precision microwave components.

- Precision coaxial connector systems to 65 GHz
- High-directivity SWR auto testers and bridges
- Precision terminations and air lines
- Precision step attenuators
- Precision bias tees
- Precision coaxial and waveguide to coax adapters
- RF detectors
- Precision fixed attenuators
- Precision power dividers and splitters
- Broadband microwave limiters








To get your free Anritsu connector user guide poster, go to www.anritsu.us/connectorguide

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