



Agilent

Helping you
focus where it counts
in aerospace and defense



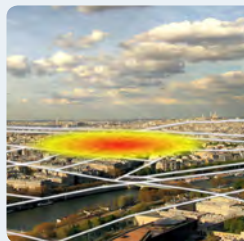
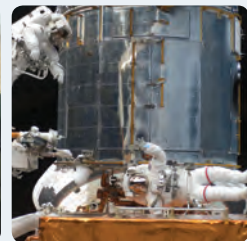
Agilent Technologies

FOCUS WHERE IT COUNTS



As missions evolve, one thing stays the same: the need to protect those who go in harm's way. To keep them safe, you need the right test tools to ensure your systems are ready and operating at optimal performance. As technology becomes more complex, ensuring readiness gets tougher.

When you leverage our expertise in test and measurement, you'll have more time for the bigger issues: fulfilling today's mission and managing the transition to what comes next. By helping you build greater assurance in system readiness, Agilent frees you to focus where it counts most.



Test and Measurement Solutions

Agilent can help you maximize your system efficiency, performance and readiness through proactive migration and modernization. You can use our high-performance test equipment to test your systems today and upgrade them to meet tomorrow's requirements. We work to ensure the cost of ongoing, long-term support is affordable and consistent with changes in your priorities and budgets—across the life of your systems.

We provide you with leading applications and solutions for the aerospace and defense industry — for radar, electronic warfare, military communications, satellite testing, homeland security, avionics, guidance, navigation and GPS systems.

RADAR/EW

Conquer the complexity of radar and electronic warfare

As technology evolves, so do your challenges in detection, avoidance, electronic warfare (EW) and countermeasures. From simulations of an arriving wavefront with multiple emitters to testing of precision components in a receiver, our solutions can help you conquer the complexity of radar and EW applications.

For application notes, training opportunities, test equipment information and more, visit

www.agilent.com/find/radarew

Agilent M9392A: *M9392A PXI microwave vector signal analyzer enables measurements up to 26.5 GHz with 250 MHz bandwidth for radar and avionics applications*



MILCOMM

Ensure interoperability of your military communication systems

To keep pace with existing and future missions, you need measurement solutions that can test versatile radios throughout their lifecycles. From dynamic probing inside an FPGA to testing digital IF and RF subsystems, we can help you ensure system readiness.

For application notes, training opportunities, test equipment information and more, visit

www.agilent.com/find/militarycomms

Agilent teams with PrismTech to provide connected Algorithm-to-SCA flow for software-defined radios.



Test and Measurement Solutions

SATELLITES

Make sure your satellites work right the first time

From guidance systems to satellite payloads to microwave communications—design and validation tools from Agilent provide greater assurance that your satellite and its subsystems will work the first time, every time, for the duration of the mission.

For application notes, training opportunities, test equipment information and more, visit

www.agilent.com/find/satellite

Agilent E4360A Solar Array Simulators:
Verify satellite PCPU functionality under realistic environmental and operational conditions such as eclipse, spin, and battery charging.



AVIONICS

Ensure the accuracy and reliability of your avionics, guidance, and navigation systems

The need for accuracy and reliability of avionics, guidance, and navigation systems is necessary whether you're testing to achieve regulatory certification or meet demanding system specifications. Solutions from Agilent enable extensive testing of the systems that ensure safe, successful journeys.

www.agilent.com/find/avionics

Agilent calibration systems provide automated calibration for spectrum analyzers, systems, signal generators and power sensors.



KEY PRODUCTS

for aerospace and defense test applications



SIGNAL ANALYZERS

Agilent's X-Series signal analyzers, up to 50 GHz, up to 325 GHz with external mixing, allow accurate measurement of distortion, spurious, phase noise, and noise figure for military/wireless communications. Extend instrument longevity and keep test assets current with upgradeable processor, memory, connectivity, and more.



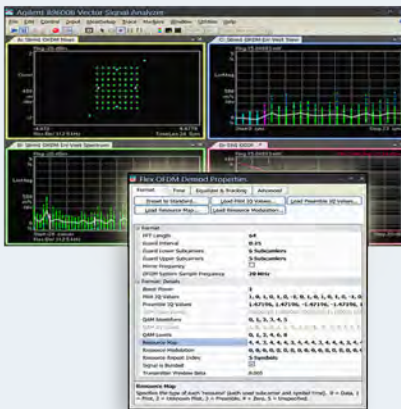
The future-ready PXA is the evolutionary replacement for your current high-performance analyzer.

- 140 MHz analysis bandwidth
- -172 dBm DANL with Noise Floor Extension (NFE)
- -129 dBc/Hz phase noise at 10 kHz offset

www.agilent.com/find/X-Series

VSA (VECTOR SIGNAL ANALYSIS) SOFTWARE

The 89600B VSA provides a window into virtually every facet of a signal problem so you can see the "why?" behind unexpected signal interactions.



Find the root cause of signal problems with advanced troubleshooting tools in the time, frequency and modulation domains.

- Works with signal analyzers, oscilloscopes and logic analyzers in RF, IF and digital domains
- More than 70 signal standards and modulation types supported
- Supports multichannel measurements up to 4 channels

www.agilent.com/find/89600B

M9392A PXI VECTOR SIGNAL ANALYZER

The Agilent M9392A is a PXI vector signal analyzer with frequency coverage from 50 MHz to 26.5 GHz and 250 MHz of instantaneous bandwidth.



Combine with the 89600B VSA software for a complete microwave vector signal analyzer solution enabling analysis of communications, radar, and avionics signals in a modular, open-system standard.

- PXI form-factor; MOSA conformant
- 12-bit 2 GSa/s digitizer

www.agilent.com/find/M9392A

PULSE MEASUREMENT SOFTWARE

The N9051A pulse measurement software measures a wide range of pulse parameters and statistics.



N9051A pulse measurement software

- Works on signal analyzers and oscilloscopes
- Measures common pulse parameters
- Display up to 999 pulse parameters and cumulative statistics over time

www.agilent.com/find/N9051A

KEY PRODUCTS

for aerospace and defense test applications

SIGNAL GENERATORS

Agilent offers the widest selection of baseband, RF, and microwave signal generators from baseband to 67 GHz, with frequency extensions to 500 GHz. Available signal creation software simplifies the generation of complex pulse trains and modulations.

www.agilent.com/find/sg
www.agilent.com/find/signalstudio



The E8267D PSG vector signal generator provides flexible I/Q modulation up to 44 GHz

- Up to 2 GHz RF modulation bandwidth
- Output power up to +18 dBm
- Typical 1 GHz phase noise of -143 dBc/Hz at 10 kHz offset
- Signal Studio software available for quick creation of Agilent-validated and performance-optimized reference signals

FUNCTION AND ARBITRARY WAVEFORM GENERATORS

Agilent offers a range of arbitrary waveform generators to generate pulses, pattern, modulations, noise and arbitrary signals up to 12 GSa/s.

www.agilent.com/find/awg



The M8190A arbitrary waveform generator

- 14 bit at 8 GSa/s
- 12 bit at 12 GSa/s
- Up to 80 dBc SFDR.
- 2 GSa memory per channel.
- 5 GHz analog bandwidth.

MODULAR INSTRUMENTS

Agilent offers modular RF, switching and data acquisition solutions that are easily expandable and reconfigurable.

www.agilent.com/find/modular



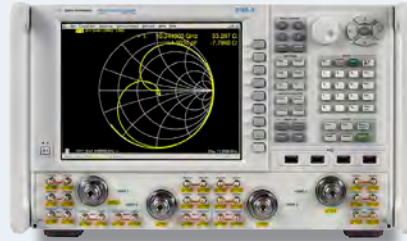
New configurable modular instruments in PXI™ and AXIe™ formats

- Modular and synthetic instruments available in PXI, AXIe, VXI, LXI and USB formats
- Get the best value in high quality switching and measurements in compact, cost effective solutions
- Industry standard software drivers and support for multiple development platforms including Microsoft Visual Studio®, LabView, MATLAB® and VEE.



NETWORK ANALYZERS

From 10 Hz to 1 THz, RF and microwave network analyzers fit your needs for S-parameters, X-parameters, balanced parameters, conversion loss/gain, gain and phase compression, intermodulation distortion, and noise figure. PNA-X network analyzers provide a broad range of measurements with a single set of connections to the DUT.



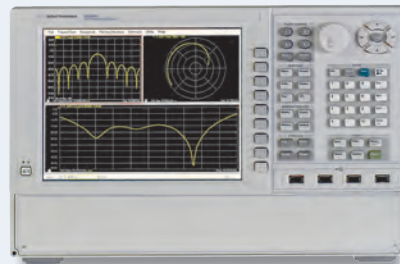
Agilent provides the premier network analyzers in the market, ranging from handheld models to mm-wave instruments.

- Industry's widest range of measurement applications with a single connection
- Up to 144 dB dynamic range
- Output power as high as +22 dBm

www.agilent.com/find/na

ANTENNA TEST

Agilent offers antenna test systems with breakthrough performance and backwards compatibility with existing 8510/8530-based installations. Agilent also provides the signal sources and accessories you need to complete your antenna test system.



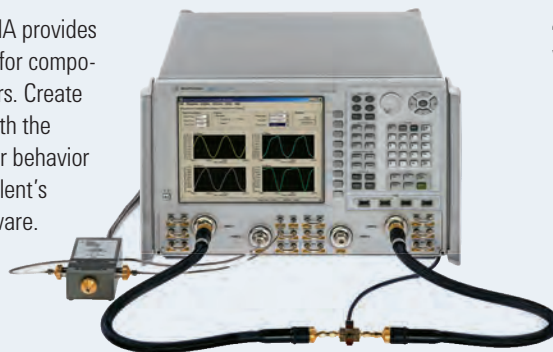
The N5264A sets a new industry standard for antenna test.

- Up to 400,000 points per second data acquisition simultaneously on five receiver channels
- Built-in 8510/8530 code emulation for drop-in replacement in existing antenna ranges
- Optional built-in 26.5 GHz LO source with +10 dBm output power

www.agilent.com/find/antenna

NONLINEAR VECTOR NETWORK ANALYZER (NVNA)

Built on the powerful PNA-X, the NVNA provides nonlinear measurements and models for components such as amplifiers and transistors. Create measurement-based X-parameters with the NVNA to simulate linear and nonlinear behavior of components and systems using Agilent's Advanced Design System (ADS) software.



4-port PNA-X network analyzer with NVNA software

- Measure amplitude and phase of spectral components in and out of the DUT, yielding waveforms traceable to the National Institute of Standards and Technology (NIST)
- Use X-parameters to predict nonlinear system behavior of cascaded components in mismatched environments
- Easily import X-parameters into Agilent's ADS for fast, accurate nonlinear simulation and design

www.agilent.com/find/nvna

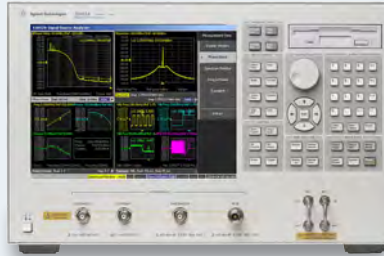
KEY PRODUCTS

for aerospace and defense test applications

SIGNAL SOURCE ANALYZER

The E5052B signal source analyzer offers high measurement accuracy and the world's highest throughput and best usability for characterizing VCOs or other types of high frequency signal sources from 10 Hz to 110 GHz, with analysis offsets of 1 Hz to 100 MHz.

www.agilent.com/find/ssa



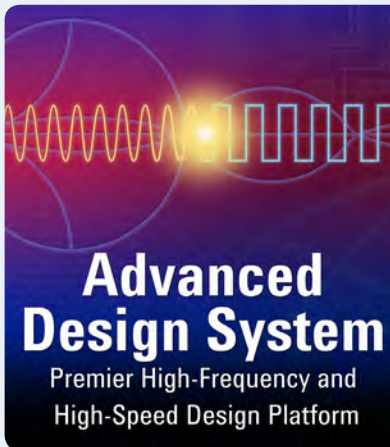
The E5052B SSA provides complete RF VCO characterization with a single instrument

- Provides AM noise and phase noise measurements with single RF connection
- Spectrum monitoring up to 15 MHz span in real-time mode
- Simultaneous transient measurements for frequency, phase and power versus time

ADVANCED DESIGN SYSTEM (ADS) HIGH-FREQUENCY AND HIGH-SPEED DESIGN PLATFORM

ADS provides a complete, integrated set of accurate and easy-to-use system, circuit and EM simulators to enable first-pass design success in a complete desktop flow

www.agilent.com/find/ADS



The leading RF & microwave physical design and verification software for radar and satellite communication applications

- Complete schematic capture and layout environment
- Multi-technology design allows multiple IC's combined with laminate and packaging PCB to all be designed together
- Integrated 3D multi-layer planar EM and full 3D FEM simulation for physical design and verification.
- X-parameter simulation and generation for accurate nonlinear circuit and system behavioral modeling design and verification

SYSTEMVUE ELECTRONIC SYSTEM-LEVEL (ESL) DESIGN SOFTWARE

SystemVue enables system architects and algorithm developers to design next-generation systems by providing RF model fidelity, wireless reference standards and real measurements into the world baseband DSP, accelerating system-level design and verification.

www.agilent.com/find/SystemVue



The W1905 Radar Model Library saves development time and verification expense in R&D for radar system architects, algorithm developers, and system verifiers.

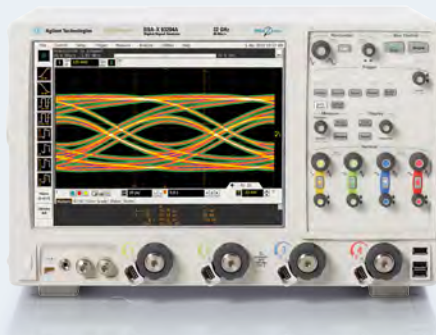
- Over 60 simulation blocks and reference designs to create radar system scenarios, processing blocks, clutter, targets, and hardware measurements.
- Supports pulsed-doppler ultra-wide band, digital arrays, beamforming, and frequency modulated continuous-wave (FMCW).



OSCILLOSCOPES

Agilent offers a complete line of oscilloscopes optimized to your test needs, from handheld units to high-performance oscilloscopes with bandwidths to 32 GHz and mixed signal scopes that provide both analog and digital channels.

www.agilent.com/find/scope



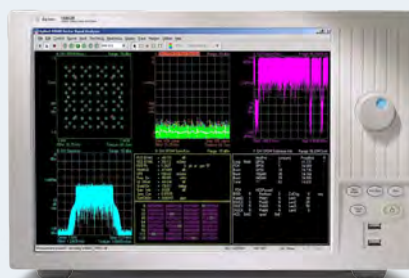
Agilent oscilloscopes with bandwidths to 32 GHz

- Models up to 32 GHz and 80 GSa/sec with 4 channels
- Up to 2 Gpts memory
- Industry's lowest oscilloscope noise floor

LOGIC ANALYZERS

Agilent offers a comprehensive family of logic analyzer products to perform system-level digital debug and address SDR measurement challenges with advanced probing solutions, measurement modules and analysis tools providing you the most complete view of system behavior.

www.agilent.com/find/logic



Agilent provides the highest performance logic analyzers in the industry, ranging from portable to modular instruments.

- Up to 4 Gb/s state data rate
- Up to 8 GHz timing
- Up to 256 M samples per channel
- From 34 channels up to hundreds of channels

POWER METERS AND SENSORS

Agilent power meters operate with CW, average and peak and average sensors covering numerous frequency and power ranges to accurately measure the power of RF and microwave signals.

www.agilent.com/find/powermeters



Agilent's power meters/sensors are the industry standard for RF and microwave power measurements

- Bench and handheld peak and average power meters
- Power meter and computer controlled (USB) power sensors
- Sensors from -70 to +44 dBm and frequency coverage from 9 kHz to 110 GHz

POWER SUPPLIES AND LOADS

Our broad selection of bench-friendly and system-ready power supplies can meet your testing challenges—from basic to complex—with a wealth of available capabilities.

www.agilent.com/find/power



Choose from a broad selection of bench and system-ready supplies

- DC power supplies: single and multiple output to 6600 W
- DC electronic loads: single and multiple input from 150 W to 600 W
- Solar array simulators for accurate simulation of any type of solar array: scalable, modular systems ranging from 600 W to tens of kW

OTHER PRODUCTS

for aerospace and defense test applications



DIGITAL MULTIMETERS

The world's most trusted DMMs, handheld, modular, and bench models to 8½ digits.

www.agilent.com/find/dmm

HIGH RESOLUTION AND USB DIGITIZERS

High-speed, high resolution digitizers in modular, LXI and USB versions allow you to capture your data without compromise.

www.agilent.com/find/digitizers

FREQUENCY COUNTERS

10 and 12 digits/s frequency counters; microwave models up to 46 GHz including high-stability options.

www.agilent.com/find/counter

34972A/34980A DATA ACQUISITION AND SWITCHING

34972A LXI Data Acquisition collects data without programming. 34980A offers more channels and greater flexibility

www.agilent.com/find/dataacquisition

U2300A FAMILY OF DATA ACQUISITION PRODUCTS

Data loggers and data acquisition products have flexible measurement capabilities with modular acquisition cards.

www.agilent.com/find/DAQ

HANDHELD PRODUCTS

Agilent now offers rugged, portable network analyzers, spectrum analyzers, cable testers, oscilloscopes and multimeters

www.agilent.com/find/handheld

RF AND MICROWAVE TEST ACCESSORIES

Choose from over 200 accessories (including microwave switches, attenuators, amplifiers, more), DC to 67 GHz, that provide superior RF performance to complete your test systems.

www.agilent.com/find/mta

PROTOCOL ANALYZER AND EXERCISER

Digital Test Console, a complete and integrated PCIe Test Solution — supporting all speeds of PCIe.

www.agilent.com/find/protocol

8990B PEAK POWER ANALYZER

The Agilent 8990B peak power analyzer provides complete and accurate characterization of today's complex pulsed signals with a frequency range of 50 MHz to 40 GHz.

www.agilent.com/find/peakpoweranalyzer

N9038A MXE EMI RECEIVER

CISPR 16-1-1 compliant receiver providing both radiated and conducted EMI tests.

www.agilent.com/find/MXE



Helping you keep pace with new technologies

You can count on us to provide you with leading-edge test solutions when you need them. We'll help you take advantage of Agilent innovations such as nonlinear vector network analysis and X-parameters* that provide critical, detailed information about nonlinear device behavior.

Developing the products and services you need

Agilent has been providing the Aerospace and Defense industries with products and services for nearly 70 years, so we understand and develop COTS products tuned to your needs.

Here are just a few examples of how Agilent products meet your requirements:

Technology refresh services

Whether you are migrating to a new technology, extending the life of an existing system or developing a new program, Agilent has services and solutions to assist you in refreshing your existing test and measurement applications.

Test system development: Hire Agilent to refurbish or develop code-compatible replacement systems or subsystems.

Instrument migration and planning services:

Use Agilent consultants to evaluate your aging test applications and help develop a migration strategy.

Product support: Extended warranty and service options for your aging instruments.

Traceable standards and standards-based calibration

Agilent instruments are built to NIST, NPL and JEMIC traceable standards. Our quality system includes ISO 9001:2000 and ANSI Z540-1-1994 certification as well as ISO / IEC 17025 Compliance and Accreditation. Our service centers include 28 ISO 17025 Accredited Laboratories across the world.

Instrument security features

Many Agilent instruments have been designed with security requirements such as removable storage subsystems. The ability to remove user data and state or usage information enables you to remove your information and keep it in a secure area. Memory scrubbing/cleaning procedures are also available for many instruments. To find the security procedures for your product, visit www.agilent.com/find/security

Instrument and code compatibility

Most instruments provide code compatibility modes to take advantage of new capabilities. Some instruments provide instructions or modes that emulate special setups commonly used in previous models. When drop-in compatibility is not possible, Agilent may be able to provide a test code conversion service.

www.agilent.com/find/techrefresh



Procuring and managing your assets

Financing solutions: Simplify the management of your assets with flexible rental, leasing and finance terms through Agilent and our partners.

Trade in program: Utilize Agilent's trade-in program to update, migrate or dispose of aging assets.

Turnkey and custom test systems

When you want help building an ATE system or require a turnkey test system, Agilent's Aerospace and Defense ATE Systems Team (ADATEST) and our partners can help. ADATEST offers specialized consultant engineers who deliver integrated, customized, and comprehensive test and measurement solutions tailored to meet the requirements of the A/D community. For more information, visit www.agilent.com/find/adsystems or contact your local Agilent representative. To contact an Agilent solution partner, visit www.agilent.com/find/channelpartner



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Get the latest information on the products and applications you select.



www.axiestandard.org

AdvancedTCA® Extensions for Instrumentation and Test (AXIe) is an open standard that extends the AdvancedTCA for general purpose and semiconductor test. Agilent is a founding member of the AXIe consortium.



www.lxistandard.org

LAN eXtensions for Instruments puts the power of Ethernet and the Web inside your test systems. Agilent is a founding member of the LXI consortium.



www.pxisa.org

PCI eXtensions for Instrumentation (PXI) modular instrumentation delivers a rugged, PC-based high-performance measurement and automation system.

Agilent Channel Partners

www.agilent.com/find/channelpartners

Get the best of both worlds: Agilent's measurement expertise and product breadth, combined with channel partner convenience.

"X-parameters" is a registered trademark of Agilent Technologies. The X-parameter format and underlying equations are open and documented. For more information, [click here](#).

PXI is a registered U.S. trademark of PXI Systems Alliance, Inc.

AXIe Consortium, Inc.'s application to register the AXIe logo is currently pending before the US PTO

MATLAB is a U.S. registered trademark of The Math Works, Inc.

Visual Studio is a registered trademark of Microsoft Corporation in the United States and/or other countries.



Agilent Advantage Services is committed to your success throughout your equipment's lifetime. To keep you competitive, we continually invest in tools and processes that speed up calibration and repair and reduce your cost of ownership. You can also use Infoline Web Services to manage equipment and services more effectively. By sharing our measurement and service expertise, we help you create the products that change our world.

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