

**Agilent 8719D, 8720D, and 8722D
Microwave Vector Network
Analyzers
50 MHz to 40 GHz**

**More Speed
+ More Performance Features
= Your Formula for Test Success!**



**The world's most popular microwave network
analyzers—now up to 7 times faster**



Agilent Technologies
Innovating the HP Way

An unbeatable solution – enhanced for greater performance

Agilent Technologies' family of high-performance 8720D microwave network analyzers brings together an unbeatable combination of speed, performance and ease-of-use features to solve your measurement needs. This combination is ideally suited for today's R&D and high-volume manufacturers in the communications, aerospace/defense and consumer electronics industries.



New performance highlights

Take advantage of these new features to improve your measurements.

Faster measurement speed

Faster CPU and wider 3.7 and 6 kHz bandwidth IF filters provide exceptional sweep speed, error correction, register recall and data-transfer rates.

Faster filter tuning/testing

- Reduce measurement time by optimizing measurement parameters with swept list mode.
- Simultaneously display all four S-parameters while tuning devices (available Q398).
- Quickly record or print all four S-parameters for data archiving.
- Enhance the visibility of displayed data by adding an external VGA monitor.

Accurately measure noninsertable devices

Improve product yields for noninsertable devices with adapter-removal calibration.

Store more large instrument states

Four-time increase in nonvolatile memory allows more complex calibration data and instrument-state storage and recall.

Simplify data transfers to your CAE program

Touchstone®-compatible (S2P) format provides fast data transfers for new design and simulation applications.



Measurement speed improvements for the 8720D family

Function	Improvement factor
201 points, two-port calibration	3.7
Recall 201 points	2.6
Time domain 201 points	7.6
Trace dump 201 points	2.9
List frequency 201 points	7.6

The Agilent 8720D family combines a fast synthesized source, tuned receiver, and S-parameter test set for high-performance flexibility in solving tough measurement problems.

Support and service highlights

Reduced support effort

Use the built-in disk drive to quickly and easily upgrade the flash firmware.

Backward compatibility

Backward compatibility with existing 8719Ds, 8720Ds, and 8722Ds makes leveraging your investment in software fast and easy.

Upgrade path for existing Agilent 8720D family

The 8719DU, 8720DU, and 8722DU Option 000 provides all the new performance and features for the 8720D family of VNAs.

Three-year warranty

Beginning March 1, 1998, Agilent Technologies now offers a standard three-year, return-to-Agilent warranty for the 8720D family. For more information, contact your local Agilent Technologies sales and service office.

Faster performance for existing features

Test sequencing

Internally configure and automate measurements easily and quickly with keystroke recording.

Time-domain analysis

Locate and resolve mismatches in your test device, fixture or cable. Use gating to remove unwanted responses.

Interpolative error-correction mode

Save time and avoid recalibration when changing frequencies by using the interpolative error-correction mode.

New features, performance details

Four-parameter display

Designed for speed, the 8720D family measures and displays all four S-parameters simultaneously (available Q398). Real-time tuning of communication duplexers, isolators and other filters couldn't be easier. Display any combination of reflection and transmission parameters, with magnitude, phase, group delay, Smith chart, polar, SWR, or time-domain formats. View results in overlay or split-screen format on a LCD color display with one, two or four graticules.

Swept-list mode

Speed up your testing by measuring your device at only selected frequencies. You can specify up to 30 arbitrary CW frequencies or frequency sweep segments at which to test your device. Independently set test-port power levels, number of data points and IF bandwidth for each segment. Reduce test time and increase measurement throughput by optimizing each segment to your specific test requirements.

Transfer data to your CAE program

Touchstone[®]-compatible (S2P) format provides component data files describing frequency-dependent two-port S-parameters. Measured data can then be read by electronic design automation programs, including Agilent EEsof design software, and used for circuit simulation. These programs can also access data directly using the instrument's GPIB port.

Application and test expertise at your service

24-hour telephone support

Agilent offers telephone technical and applications support 24 hours a day in most countries served by Agilent.

Agilent 8720D family literature and application notes

For complete details on the 8720D family, order the Agilent 8720D family *Brochure* (5964-6419E), *Data Sheet* (5964-9133E) and *Configuration Guide* (5964-9130E).

For application notes see Agilent's website at www.tmo.agilent.com



Agilent Technologies' Test and Measurement Support, Services, and Assistance

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

Our Promise

"Our Promise" means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you use Agilent equipment, we can verify that it works properly, help with product operation, and provide basic measurement assistance for the use of specified capabilities, at no extra cost upon request. Many self-help tools are available.

Your Advantage

"Your Advantage" means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

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