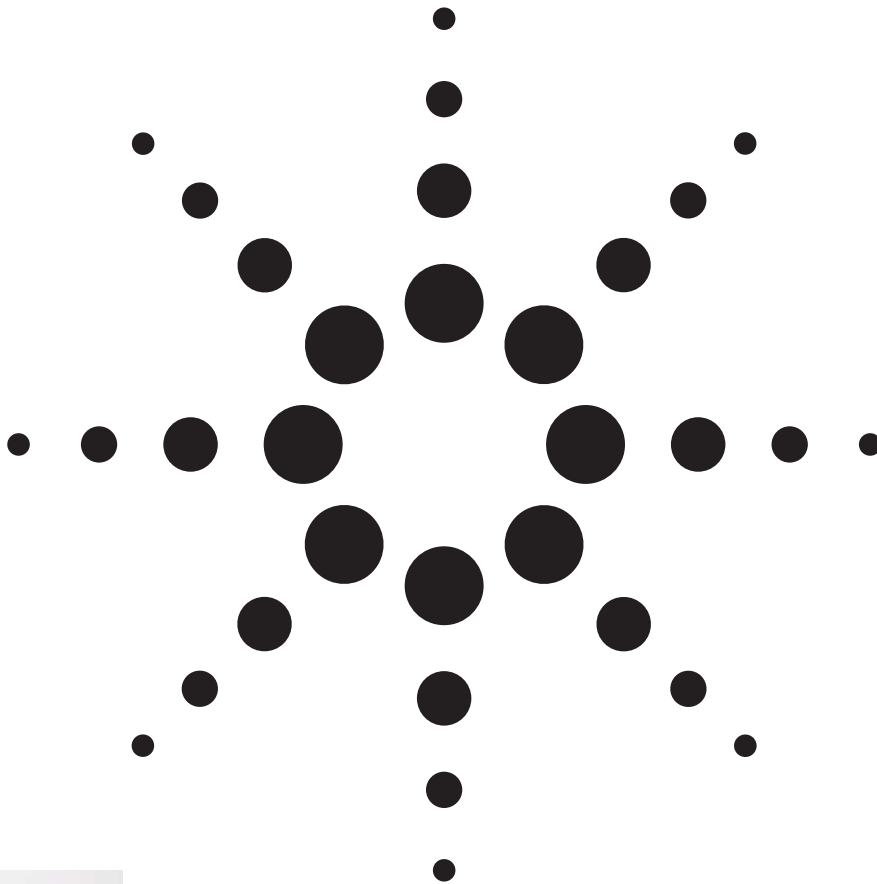# Agilent 8163A Lightwave Multimeter
Agilent 8164A Lightwave Measurement System
Agilent 8166A Lightwave Multichannel System
Technical Specifications

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Agilent 8163A Mainframe

The Agilent lightwave multimeter system includes
the mainframe and a variety of plug-in modules,
suited for set-ups requiring:

- single or dual channel power meters
- single or dual wavelength fixed or tunable sources
- loss test sets

Specifications

Display	Graphical display 190 x 300 points visible, monochrome
Display resolution	0.0001dB/dBm, 0.01pW to 10pW (depending on power range) , up to 6 1/2 digits (user definable)
Compatibility	The Agilent 8163A mainframe supports all modules from the 8153A and 8163A Lightwave Multimeter series.
Data acquisition Memory Selectable data averaging time Selectable data total acquisition time	 4000 measurement results / channel (remote 12000) depending on sensor module 1s to 23:59h
Trigger	True synchronous on all channels.
Environmental Storage temperature Operating temperature Humidity	 -40°C to +70°C 0°C to +45°C < 95% rHfrom 0°C to 45°C *The products are designed for pollution degree 2* *The maximum operation altitude is 2000m*
Power	AC 100 – 240 V ± 10%, 50/60Hz ±5%, 120VA max. *
Dimensions (Height x Width x Length) **Weight**	88mm x 213mm x 380mm (3.5" x 8.4" x 15") net 4.200kg (9.3lbs), shipping 6.5kg (14.5lbs)
GPIB capability	All modes and parameters accessible via GP-IB interface
GPIB interface function codes [1]	SCPI Standard
Interfaces	Parallel port (Centronics) Serial port (RS232)
Number of modules	2 Modules
Ordering information Agilent 8163A Lightwave Multimeter Option 908 Rack mount kit	

[1] For code compatibility to 8153 series please refer to Programming Manual P/N 08164-91016

* The products comply with overvoltage category II

Agilent 8164A Mainframe

The Agilent 8164A Lightwave Measurement System
supports a range of high-performance tunable lasre modules,
as well as all of the fixed source and sensor modules of the
Agilent 8153A and Agilent 8163A Lightwave Multimeter series

Specifications

Display	600 x 400 points visible
Display Resolution	
Compatibility [1]	The Agilent 8164A mainframe supports all modules from the 8153A and 8163A Lightwave Multimeter series.
Trigger	True synchronous on all channels.
Environmental Storage temperature Operating temperature Humidity	-40°C to +70°C 10°C to +35°C <80% rHfrom 10°C to 35°C The products are designed for pollution degree 2 The maximum operation altitude is 2000m
Power	AC 100 – 240 V ±10%, 50/60HZ , 280VA max.
Dimensions (Height x Width x Length) **Weight**	145 mm x 426 mm x 545 mm (5.8" x 16.9" x 21.6") net 20kg, shipping 23kg
GPIB capability	All modes and parameters accessible via GP-IB interface
GPIB interface function codes	SCPI Standard
Interfaces	Parallel Port (Centronics)
Number of Modules	5 Modules
Ordering Information Agilent 8164A Lightwave Multimeter Option 908 Rack mount kit	

[1] Agilent 8163A Series modules are NOT compatible with HP 8153A Lightwave Multimeter.

[2] For code compatibility to 8153 series please refer to Programming Manual P/N 08164-91016

Agilent 8166A Mainframe

The Agilent 8166A Lightwave Multichannel System
can be easily integrated into test environments by using
plug and play drivers over GPIB,or by using the configurable
hardware input and output trigger ports.

All modules of the Agilent 8163A Lightwave Multimeter
family can be used in any combination in the Multichannel
System.

Specifications

Display	Graphical display 190 x 300 points visible, monochrome
Display Resolution	0.0001dB/dBm, 0.01pW to 10pW (depending on power range) , up to 6 1/2 digits (user definable)
Compatibility [1]	The Agilent 8166A mainframe supports all modules from the 8163A Lightwave Multimeter series.
Trigger	True synchronous on all channels.
Environmental Storage temperature Operating temperature Humidity	-40°C to +70°C 0°C to +45°C < 95% rH.from 0°C to 45°C The products are designed for pollution degree 2 The maximum operation altitude is 2000m
Power	AC 100 – 240 V ±10%, 50/60HZ ±5%, 450VA max.*
Dimensions (Height x Width x Length) **Weight**	240 mm x 430 mm x 580 mm (9.5" x 17" x 23") net 23kg, shipping 45kg
GPIB capability	All modes and parameters accessible via GP-IB interface
GPIB interface function codes [2]	SCPI Standard
Interfaces	Parallel Port (Centronics) Serial port (RS232)
Number of Modules	17 Modules
Ordering Information Agilent 8166A Lightwave Multimeter Option 908 Rack mount kit	

[1] Modules (815xxx) designed for the Agilent 8153A Lightwave Multimeter are NOT compatible with the
8166A Lightwave Multichannel System.
[2] For code compatibility to 8153A series please refer to Programming Manual P/N 08164-91016
* The products comply with overvoltage category II

Agilent Technologies'
Test and Measurement Support,
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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."

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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 engineering 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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Related Agilent Literature:

Agilent 81662A DFB Laser
Agilent Fabry Perot Laser
Technical Specifications
p/n 5988-1570EN

Agilent 81640/80/82/42A Tunable Lasers
Agilent 81689A Compact Tunable Laser
Technical Specifications
p/n 5988-1567EN

Agilent Power Sensor Modules
Agilent Optical Heads
Agilent 81610A Return Loss Module
Technical Specifications
p/n 5988-1569EN

Agilent 8163A Multimeter
Agilent 8164A Lightwave Measurement System
Agilent 8166A Multichannel System
Configuration Guide
p/n 5988-1571EN

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