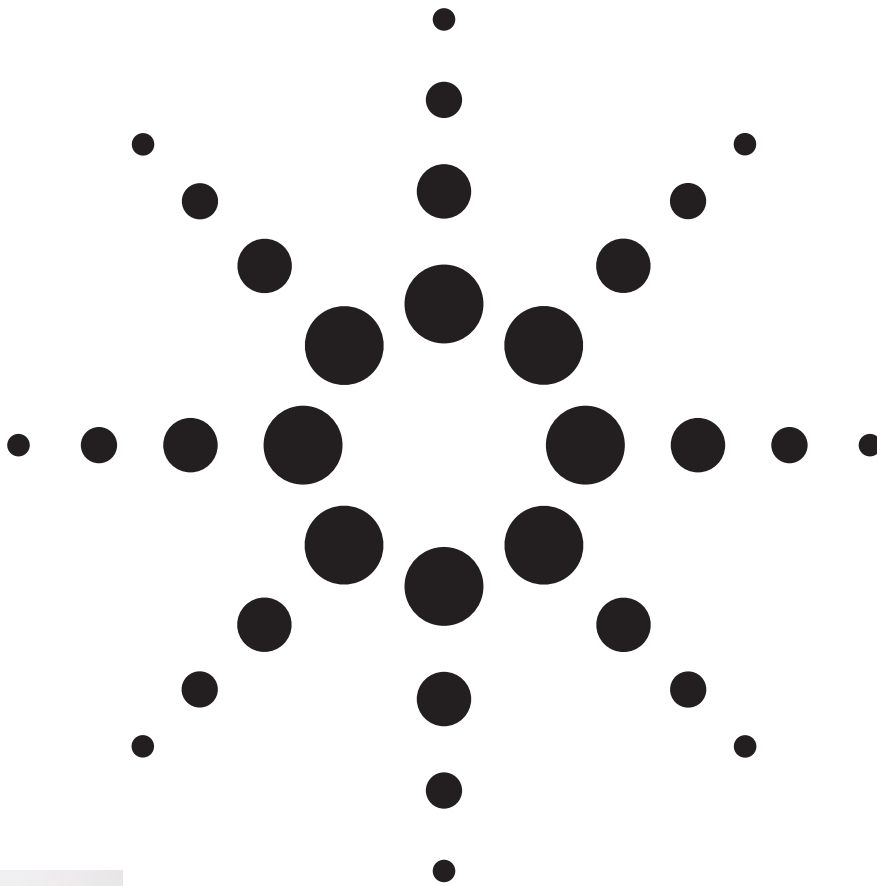




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**Agilent 8163A Lightwave Multimeter**  
**Agilent 8164A Lightwave Measurement System**  
**Agilent 8166A Lightwave Multichannel System**  
**Technical Specifications**



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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

<b>Display</b>	Graphical display 190 x 300 points visible, monochrome
<b>Display resolution</b>	0.0001dB/dBm, 0.01pW to 10pW (depending on power range) , up to 6 1/2 digits (user definable)
<b>Compatibility</b>	The Agilent 8163A mainframe supports all modules from the 8153A and 8163A Lightwave Multimeter series.
<b>Data acquisition</b> Memory Selectable data averaging time Selectable data total acquisition time	4000 measurement results / channel (remote 12000) depending on sensor module 1s to 23:59h
<b>Trigger</b>	True synchronous on all channels.
<b>Environmental</b> 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
<b>Power</b>	AC 100 – 240 V ± 10%, 50/60Hz ±5%, 120VA max. *
<b>Dimensions (Height x Width x Length)</b> <b>Weight</b>	88mm x 213mm x 380mm (3.5" x 8.4" x 15") net 4.200kg (9.3lbs), shipping 6.5kg (14.5lbs)
<b>GPIB capability</b>	All modes and parameters accessible via GP-IB interface
<b>GPIB interface function codes</b> <sup>11)</sup>	SCPI Standard
<b>Interfaces</b>	Parallel port (Centronics) Serial port (RS232)
<b>Number of modules</b>	2 Modules
<b>Ordering information</b> Agilent 8163A Lightwave Multimeter Option 908 Rack mount kit	

<sup>11)</sup> 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 laser modules, as well as all of the fixed source and sensor modules of the Agilent 8153A and Agilent 8163A Lightwave Multimeter series

### Specifications

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

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

<sup>[2]</sup> 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

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

<sup>[1]</sup> Modules (815xxx) designed for the Agilent 8153A Lightwave Multimeter are NOT compatible with the 8166A Lightwave Multichannel System.

<sup>[2]</sup> 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, 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."

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### Related Agilent Literature:

Agilent 81662A DFB Laser  
Agilent Fabry Perot Laser  
Technical Specifications  
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Agilent 81640/80/82/42A Tunable Lasers  
Agilent 81689A Compact Tunable Laser  
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Agilent Power Sensor Modules  
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Agilent 8163A Multimeter  
Agilent 8164A Lightwave Measurement System  
Agilent 8166A Multichannel System  
Configuration Guide  
p/n 5988-1571EN



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