Agilent Solution

Optical Component Test

Best Price-Performance Ratio for Optical Power Measurement

Agilent 8163A + 81636B

Fast Power Measurement

Save costs in optical component test and speed-up time to market with very fast and highly accurate power measurement

- Fast and accurate
- Low PDL: +/- 0.015 DB
- 100.000 data points
- Dynamic range: >55 dB per range
- Extra slot available for additional measurements

Offer limited until 30th of April, 2002

Order Now!

Agilent Technologies

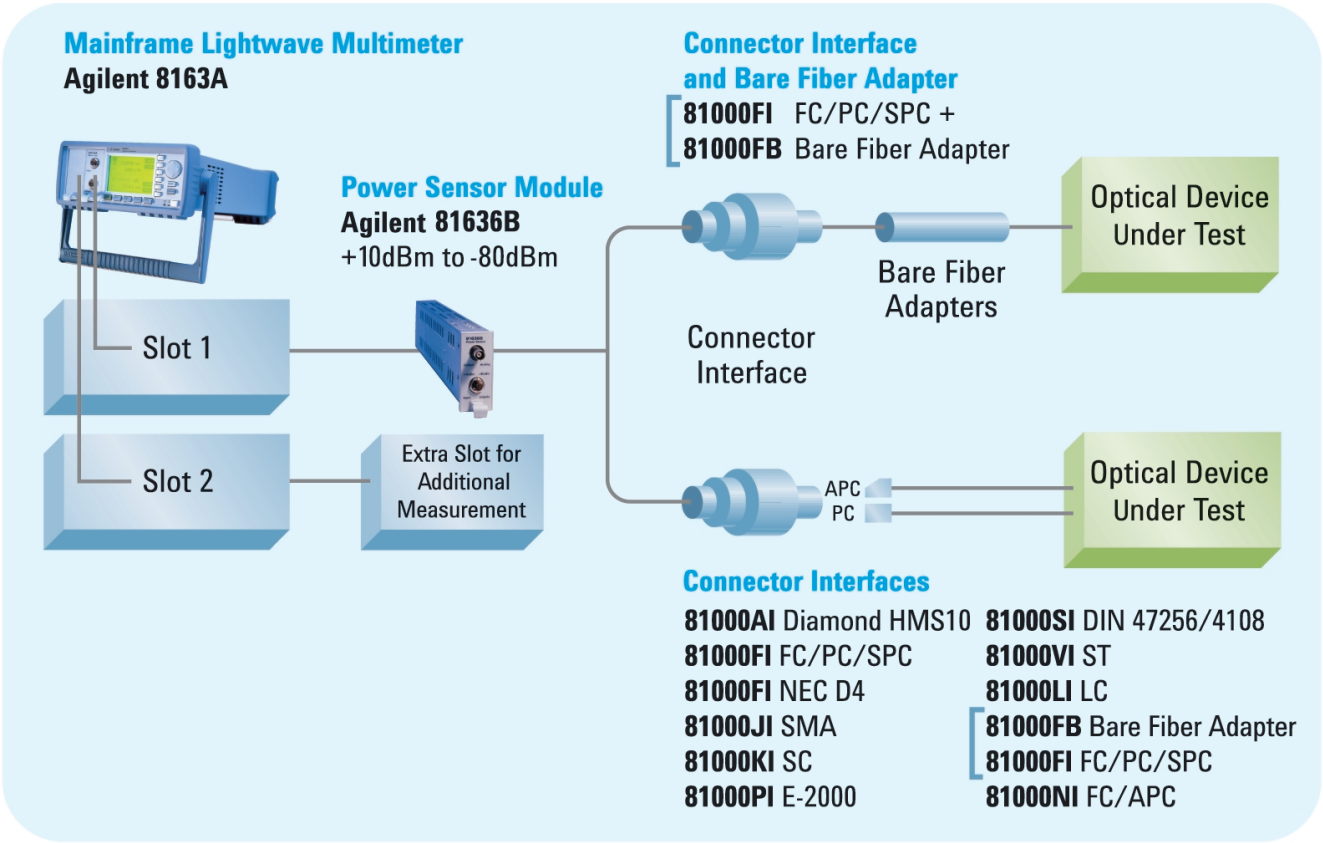
Fast Power Measurement Solution

Agilent 8163A + 81636B

Take advantage of Agilent's Power Meter Solution with unprecedented performance and measurement power to test optical components.

The Agilent 8163A + 81636B offer high performance and at the same time reduce cost of test substantially to strengthen your competitive positioning.

Test Configuration



8163A Lightwave Multimeter

The Agilent 8163A Lightwave Multimeter System is a mainframe that allows plug-in of a variety of modules, like the 81636B. It is flexible to be used in different test set-ups, requiring:

- single or dual channel power meters
- fixed of tunable laser sources
- loss test applications
- Return loss and insertion loss applications

81636B Fast Powermeter

The Agilent Fast Powermeters feature high-speed data acquisition and a high dynamic range.

Alignment and adjustment tasks performed manually or by automation are typical applications for using the Agilent 81636B Fast Power Powermeter.

Fast Power Measurement Solution

Best Price-Performance for Optical Power Measurement

Agilent 8163A 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	4000 measurement results/channel (remote 12000)
Selectable data averaging time	depending on sensor module
Selectable data total acquisition time	1s to 23:59h
Trigger	True synchronous on all channels
Environmental	
Storage temperature	–40°C to +70°C
Operating temperature	0°C to +45°C
Humidity	<95% rH from 0°C to 45°C These products are designed for pollution degree 2. The maximum operation altitude is 2000m
Power	AC 100 — 240V ± 10%, 50/60Hz ±5%, 120VA max.
Dimensions (Height x Weight x Length)	88mm x 213mm x 380mm (3.5" x 8.4" x 15")
Weight	net 4.200kg (9,3lbs), shipping 6.5kg (14.5lbs)
GPIB capability	All modes and parameters accessible via GP-IB interface
GPIB capability function codes	SCPI Standard
Interfaces	Parallel port (Centronics) Serial port (RS232)
Number of modules	2 Modules

Agilent 81636B Specifications

Sensor element	InGaAs
Wavelength range	1250 to 1640 nm
Power range	+10 to –80 dBm
Applicable fiber type	Standard SM and MM up to 62.5 µm core size, NA ≤0.24
Uncertainty (accuracy) at reference conditions	+3% (1260 nm to 1630 nm)
Total uncertainty	±5% to ±20pW (1260 nm to 1630 nm)
Relative uncertainty	
due to polarization	typ. ± 0.015 dB
spectral ripple (due to interference)	typ. ± 0.015 dB
Linearity (power)	CW +10 to –60 dBm
at 23°C ±5°C	(1280 nm to 1630 nm) <±0.02 dB ±20nW
at operating temp. range	<±0.06 dB ±20nW
Return loss	>40 dB
Noise (peak to peak)	<20 pW
Averaging time (minimal)	25µs
Dynamic Range at manual range mode	
at +10dBm range	typ. >55dB
at ±0dBm range	typ. >55dB
at –10dBm range	typ. >52dB
at –20dBm range	typ. >45dB
Linearity (power) at manual range mode	CW +10 to –60 dBm (1280 nm to 1630 nm)
at +10dBm range	<±0.02 dB ±50nW
at ±0dBm range	<±0.02 dB ±5nW
at –10dBm range	<±0.02 dB ±1nW
at –20dBm range	<±0.02 dB ±500pW

Order Information

Agilent 8163A + 81636B
Single channel powermeter solution consisting of
Agilent 8163A Mainframe and
Agilent 81636B Powersensor

Choose your connector type

81000AI Diamond HMS10
81000FI FC/PC/SPC
81000FI NEC D4
81000JI SMA
81000KI SC
81000PI E-2000
81000SI DIN 47256/4108
81000VI ST
81000LI LC
81000FB Bare Fiber Adapter
81000FI FC/PC/SPC
81000NI FC/APC

Test Innovations That Improve Your Bottom Line

Optical Component Test	Passive Component Test											Optical Amplifier Test			Bit Error Ratio Test		
	Mux/DeMux/V-Mux	TFF Test	FBG Filter Test	Connector Test	Switch Test	TFF Align-/Adjustment	Fiber to AWG Alignment/ AWG Chip Test	Couper/Splitter/Combiner	Isolator/Circulator	Variable Optical Attenuator	Gain Flattening Filter	EDFA	Raman Amplifiers	SOA	Rx/Tx	Line Card	System Test
Tunable Laser 81480A, 81640A, 81680A	●	●	●		●	●	●	●	●	●	●						
Tunable Laser 81642A, 81682A					●			●	●	●	●	●	●	●			●
Compact Tunable Laser 81649A, 81689A/B								●	●			●	●	●	●		●
Distributed Feedback (DFB) Laser 81662A, 81663A												●	●	●			●
Fabry-Perot Laser				●	●	●	●	●	●								
Power Meter 8163xB	●	●	●	●	●	●	●			●	●	●	●		●	●	●
Optical Heads						●		●	●	●	●				●	●	●
Return Loss Modules 81610A, 81611A, 81612A 81613A, 81614A			●	●	●	●	●	●	●	●	●	●					
Attenuator 81560A, 81561A, 81566A, 81567A												●			●	●	●
Polarization Controller 8169A		●	●	●		●		●	●	●	●	●	●				
Polarization Controller 11896A						●			●	●			●	●	●		
Digital Communications Analyzer (DCA)																●	
Bit Error Ratio Tester (BERT)																	●
SONET/SDH Tester																●	●
Optical Spectrum Analyzer (OSA)														●	●	●	
Mainframes 8163A/B				●		●		●	●	●					●	●	●
8164A/B	●	●	●		●		●	●	●	●	●	●	●	●	●	●	●
8166A/B	●				●		●					●	●		●	●	●
Photonic Foundation Library			●	●	●		●	●	●	●	●	●	●				

For related literature please visit http//: www.agilent.com/cm/rdmfg/oct/literature/octselection.pdf

By internet, phone, or fax, get assistance with all your test & measurement needs

For further information, please visit www.agilent.com/comms/comp-test

Phone or Fax

United States:
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Europe:
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(fax) (31 20) 547 2390

Latin America:
(tel) (305) 269 7500
(fax) (305) 269 7599

New Zealand:
(tel) 0 800 738 378
(fax) 64 4 495 8950

Asia Pacific:
(tel) (852) 3197 7777
(fax) (852) 2506 9284

Canada:
(tel) 1 877 894 4414
(fax) (905) 282-6495

Japan:
(tel) (81) 426 56 7832
(fax) (81) 426 56 7840

Australia:
(tel) 1 800 629 485
(fax) (61 3) 9210 5947

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