HP 8158B

Optical Attenuator

Limited Availability
Used and in Excellent Condition

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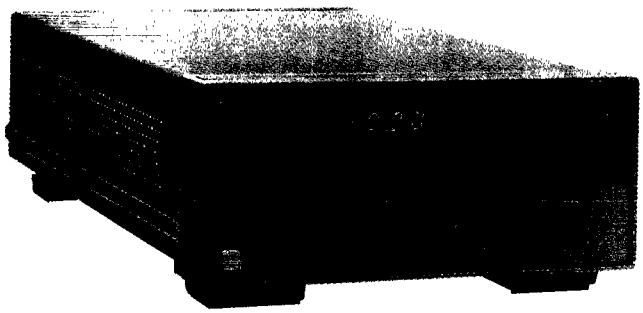
https://www.artisantg.com/70676-5

FIBER OPTIC TEST EQUIPMENT

Optical Attenuator

Model 8158B option 001 (600-1200nm), option 002 (1200-1650nm)/Model 8157A (1200-1650nm)

- High resolution of 0.01dB
- Short settling time (typ. 20ms)
- Suited for multimode and single-mode fibers (8158B)



HP 8158B option 002 option 011

DESIGNED FOR HP-IB SYSTEMS

The HP 8158B Optical Attenuator is a fully programmable and highly flexible test instrument. Due to its state-of-the-art fiberless design, all applications employing fibers with a numerical aperture up to 0.3 are covered with one instrument. Multimode and single-mode measurements can thus be easily performed.

HP 8158B Specifications

All specs. are measured with Diamond® HMS-10/HP connectors

Optical Characteristics

Wavelength Range: 600-1200nm (opt. 001), 1200-1650nm (opt. 002)
Applicable Fiber Type: all fiber types with an NA≤0.3
Attenuation Range (excluding insertion loss): 60.00dB
Insertion loss (incl. both connectors)

	single-mode 9um[1]	multimode 50um
worst case	<4.0dB	<2.0dB
typical	2.0dB	1.0dB

[1]option 002 only

Linearity: <±0.4dB for single-mode, <±0.2dB for multimode
Return loss (excluding connectors): > 27dB

HP 8157A Specifications

Optical Characteristics

All specifications are measured with Diamond® HMS-10/HP connectors. The connectors must have Manufacturing Date Code Week 31-87 or higher.
Wavelength Range: 1200-1650nm
Applicable Fiber Type: single-mode fiber
Attenuation Range (excluding insertion loss: 60.00dB
Insertion loss (incl. two Diamond® HMS-10/HP connectors): ≤4.0dB
Linearity: ±0.2dB (typical ± 0.05dB)
Return loss (incl. Diamond® HMS-10/HP connectors and terminated fiber-end): >33dB

HP 8157A/HP 8158B Specifications

Display

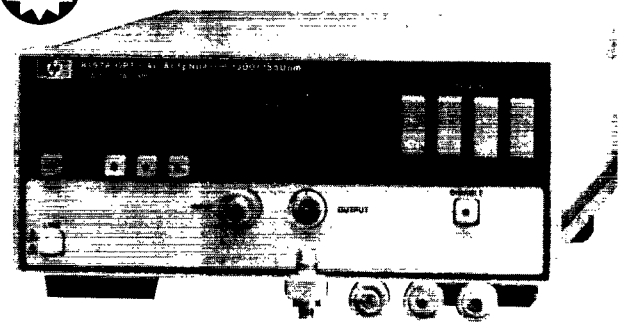
Display range: 0.00 to 64.00dB
Display resolution: 0.01dB (min. step size)

Supplementary Performance Characteristics

Repeatability (of attenuation after a max. of 6 matings with same connector):
single-mode (9μm): <0.2dB
multimode (50μm): <0.1dB (HP 8158B only)
Operating Modes
Output disable: Optical signal path interrupted
λ: Entering of wavelength for automatic correction of attenuation using typical correction values
Att: Attenuation is displayed and can be varied
Cal: Entry of calibration factor to adjust display so that displayed value indicates actual power level at output connector of attenuator. Range: ±99.99dB

- Customer-exchangeable connector adapters (8157A)
- >36dB typical return loss (8157A)

NEW



HP 8157A shown with all four available connector options (in the foreground)

DESIGNED FOR HP-IB SYSTEMS

The 8157A is a high performance single-mode attenuator for the 1200-1650nm wavelength range. Its excellent linearity, very high return loss and polarization insensitivity make it the ideal attenuator for bit error rate tests on fast optical systems.

General

HP-IB Capability
All modes and parameters can be programmed
Listen (time to receive, verify and set up parameter)
Output disable/enable, attenuation, λ: <20 to 550ms (HP 8157A)
λ: <20 to 400ms (HP 8158B)
(depending on actual setting/programmed parameter)
Cal: <5ms
HP-IB Interface Function Code: SH1, AH1, T6, L4, SR1, RL1, PP0, DC1, DT0, C0
Recalibration period: 1 year
No warm-up time required if previously stored within operating temperature range.
Environmental
Storage Temperature: −40°C to +75°C
Operating Temperature: 0°C to +55°C
Humidity: <95% R.H. from 0°C to +40°C
Power: 100/120/220/240Vrms, +5%, −10%, 48-400Hz, 90VA max.
Battery back up (for non-volatile memory): with instrument switched off all current modes and data will be maintained for at least 10 years after instrument delivery
Dimensions: 89mm(H) x 212.3mm(W) x 345mm(D) (3.5"x 8.36"x13.6")
Weight: net 5.3kg (11.7lbs), shipping 9.6kg (21.2lbs)

Ordering Information

	Price
HP 8158B Optical Attenuator	$2240
Opt. 001: 600-1200nm	$3970
Opt. 002: 1200-1650nm	$3970
Opt. 011: Diamond® HMS-10/HP connector	$710
Opt. 012: FC/PC connector[1]	$1020
Opt. 013: DIN 47256 connector	$1020
Opt. 014: ST connector[1]	$1020
HP 8157A Optical Attenuator 1200-1650nm	$8400
Opt. 011: Diamond® HMS-10/HP connector interfaces	$580
Opt. 012: FC/PC connector interfaces	$580
Opt. 013: DIN 47256 connector interfaces	$580
Opt. 014: ST connector interfaces	$580
Opt. 907: Front handle kit (HP P/N 5061-9688)	$50☎
Opt. 908: Rack flange kit (HP P/N 5061-9672)	$50☎
Opt. 916: Additional operating manual	$31
P/N 5061-9701 Bail handle kit	$38☎

[1]multimode only

For interface adapters, cables and accessories see "Fiber Optic Test Accessories" on page 307.

☎ Fast-Ship product—see page 758.