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Data Sheet

August 13, 2026

HP / AGILENT

HP / Agilent 81560A Variable Optical Attenuators

HP / Agilent 81560A Variable Optical Attenuator Module Straight Connector The Agilent/HP 81560A is a single-slot variable optical attenuator plug-in for the 8163/8164/8166 Lightwave platforms. Straight versatile connector interface on 9/125 μ m SMF28, 1200 to 1700 nm, 0 to 60 dB attenuation at 0.001 dB resolution. Intended for single-wavelength applications with wavelength-dependent correction and an integrated shutter. Maximum input +22 dBm. BER and transceiver characterization; single-channel loss simulation; relative power leveling after reference calibration; multi-slot VOA banks in 8166A/B. The Agilent/HP 81560A is a single-slot variable optical attenuator plug-in for the 8163/8164/8166 Lightwave platforms. Straight versatile connector interface on 9/125 μ m SMF28, 1200 to 1700 nm, 0 to 60 dB attenuation at 0.001 dB resolution. Intended for single-wavelength applications with wavelength-dependent correction and an integrated shutter. Maximum input +22 dBm. BER and transceiver characterization; single-channel loss simulation; relative power leveling after reference calibration; multi-slot VOA banks in 8166A/B.

**MODEL****HP / Agilent
81560A****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****81560A****LISTING**<https://aumictechlabs.com/products/81560a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 81560A Variable Optical Attenuator is a plug-in module for the Lightwave Multichannel platform that provides precision attenuation of optical signals across the C-, L-, and extended bands. Operating from 1200 nm to 1700 nm, it delivers 0 to 60 dB of attenuation with

0.001 dB resolution and ± 0.1 dB accuracy. The module accepts up to +22 dBm input power and integrates an electronically controlled shutter for channel simulation and protection. Technical Specifications Attenuation Range: 0 to 60 dB Resolution: 0.001 dB Accuracy: ± 0.1 dB Repeatability: ± 0.01 dB Wavelength Range: 1200 nm to 1700 nm Fiber Type: 9/125 μ m SMF28 Single Mode Fiber Insertion Loss: Typically ≤ 1.5 dB (excluding connectors) Insertion Loss Flatness: Typically ± 0.1 dB ($1420 \text{ nm} < \lambda < 1615 \text{ nm}$) Polarization Dependent Loss: < 0.05 dBpp Return Loss: ≥ 50 dB Maximum Input Power: +22 dBm Shutter Isolation: Typically 100 dB Settling Time: Typically 100 ms Warm-up Time: 30 min Key Features Manual and remote control via GPIB, RS-232, or USB Integrated optical shutter for channel drop simulation Reference power functionality for normalized attenuation and power displays Automatic wavelength corrections applied on operator input Compact form factor: 75 mm $\times$ 32 mm $\times$ 335 mm (2.8" $\times$ 1.3" $\times$ 13.2") Operating temperature range: 10 $^{\circ}$ C to 45 $^{\circ}$ C Recommended recalibration interval: 2 years Typical Applications Optical power level control in single-wavelength test configurations Channel drop simulation in multichannel systems Signal attenuation for receiver saturation testing Telecommunications test and measurement Compatibility & Integration Designed as a plug-in module for Agilent's Lightwave Multichannel platform (8163A/B, 8164A/B, 8166A/B). Connects via straight connector to host chassis.

Features & description

From manufacturer datasheet

Features

- Single-slot cost-effective VOA for single-wavelength use
- Wavelength entry applies automatic corrections
- Reference power offset; attenuation and relative power display
- Integrated shutter for protection / channel-drop simulation
- Straight versatile optical connector interface

Polarization Dependent Loss: less than 0.05 dBpp

Return Loss Typical Straight: 45 dB Maximum Input Power: +22 dBm (exposure time less than 2 h)
Shutter Isolation Typical: 100 dB Dimensions: 75 mm x 32 mm x 335 mm Net Weight: 0.9 kg
Recommended Recalibration Period: 2 years Operating Temperature: 10 C to 45 C Warmup Time: 30 minutes Humidity: noncondensing Mainframe Compatibility: 8163A/B 8164A/B 8166A/B Related Angled Sibling: 81561A Alias: HP 81560A; Agilent 81560A; Keysight 81560A Notes Warranted and typical rows from Agilent 8156xA/8157xA Optical Attenuators technical specifications (5988-2696EN class, December 2002). High-power input corrections at greater than +10 dBm are documented in that datasheet footnotes.

81560A Characteristics / Specifications

PARAMETER	VALUE
Model	81560A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Variable optical attenuator module
Slot Width	single slot
Connectivity	straight connector versatile interface
Fiber Type	9/125 um SMF28
Wavelength Range	1200 nm to 1700 nm
Attenuation Range	0 to 60 dB
Resolution	0.001 dB
Repeatability	plus/minus 0.01 dB (constant wavelength and temperature)
Accuracy Uncertainty	plus/minus 0.1 dB (1550 nm plus/minus 15 nm; input power less than or equal to +10 dBm)
Accuracy Typical Broader Band	plus/minus 0.1 dB typical for 1250 nm to 1650 nm
Settling Time Typical	100 ms (step size less than 1 dB)
Full Range Settling Typical	6 s
Insertion Loss Typical	1.7 dB (1550 nm plus/minus 15 nm with reference connectors)
Polarization Dependent Loss	less than 0.05 dBpp
Return Loss Typical Straight	45 dB
Maximum Input Power	+22 dBm (exposure time less than 2 h)
Shutter Isolation Typical	100 dB
Dimensions	75 mm x 32 mm x 335 mm
Net Weight	0.9 kg
Recommended Recalibration Period	2 years
Operating Temperature	10 C to 45 C
Warmup Time	30 minutes
Humidity	noncondensing

PARAMETER	VALUE
Mainframe Compatibility	8163A/B 8164A/B 8166A/B
Related Angled Sibling	81561A
Alias	HP 81560A; Agilent 81560A; Keysight 81560A
Attenuation	Range: 0 to 60 dB
Return loss	Typical Straight: 45 dB

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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Humidity	noncondensing
Warmup Time	30 minutes
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Alias	HP 81560A; Agilent 81560A; Keysight 81560A Notes Warranted and typical rows from Agilent 8156xA/8157xA Optical Attenuators technical specifications (5988-2696EN class, December 2002). High-power input corrections at greater than +10 dBm are documented in that datasheet footnotes.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.