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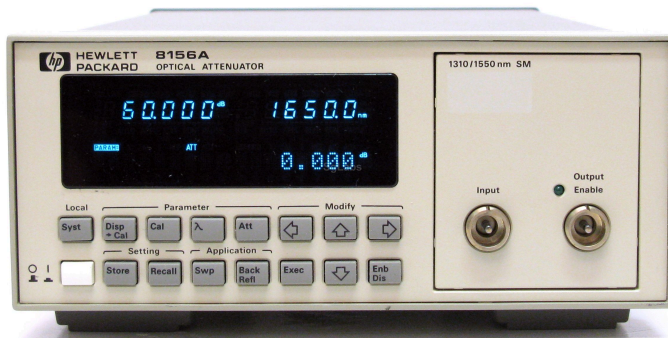
Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent Keysight 8156A-121 Optical Attenuator Module

The Agilent/Keysight 8156A-121 is a versatile optical attenuator designed for precise control of optical power levels. It features a wide attenuation range, low insertion loss, and excellent repeatability, making it suitable for various fiber optic testing and measurement applications.

**MODEL****Agilent / Keysight
8156A-121****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****8156A-121****LISTING**<https://aumictechlabs.com/products/8156a-121-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 8156A-121 is a optical attenuator module for precise control of optical power levels in fiber optic systems. It delivers 60 dB attenuation range with 0.001 dB resolution across 1200–1650 nm, supporting both single-mode and multimode fiber applications in R&D and production environments. Technical Specifications Wavelength Range: 1200 nm to 1650 nm Attenuation Range: 60 dB (excluding insertion loss) Attenuation Resolution: 0.001 dB Attenuation Accuracy (Linearity): Typical < ±0.1 dB Repeatability: Typical 45 dB Insertion Loss: Typical 3.3 dB (excluding connectors) Polarization Dependent Loss (PDL): Typical < 0.1 dBpp Polarization Mode Dispersion (PMD): 6 fs Monitor Output: 13 dB tap (1:20 ratio) Power Requirements: 100/120/220/240 Vrms (±10%), 45–400 Hz, 90 VA max Operating Temperature: 0°C to 55°C Storage Temperature: -40°C to 80°C Dimensions: 9 mm H × 212.3 mm W × 345 mm D Weight: 5.3

kg net; 9.6 kg shipping

Key Features

- Single-filter design eliminates dark spots and attenuation overshoots/undershoots
- Fiber type compatibility: Single-mode (9/125 μm) and 50 μm multimode
- Built-in monitor output for comprehensive testing and validation
- Straight optical contact (PC) connectors
- Battery backup for non-volatile memory (10-year data retention)
- GPIB (HP-IB) control interface for automated attenuation sweeps

Typical Applications

- Telecommunications research and development
- Production testing of fiber optic systems
- Automatic attenuation sweep characterization
- Optical power level validation across extended wavelength ranges

Compatibility & Integration

Designed for integration with Agilent/Keysight 8156A mainframe and related test platforms. Option 121 requires three connector interfaces; 81000xI Series optical interface connectors sold separately.

Features & description

From manufacturer datasheet

High Power Handling Class: high power

Low Power Handling Class: low power Module Build Class: attenuator module build Operating Temperature Class: 0 C to 40 C Storage Temperature Class: minus 40 C to 70 C Line Power: 100/120/220/240 V Humidity Class: non condensing Display: attenuation setpoint display Calibration: wavelength calibrated attenuation Duty: continuous optical test Grounding: chassis ground Cooling: convection Mass Class: benchtop instrument Notes Files map 8156A-100 8156A-101 and 8156A-121 inventory options to the 8156A optical attenuator family. Confirm option-specific power rating on the unit label. Family identity from Agilent/HP 8156A optical attenuator literature. Option suffixes 100 101 121 select power and packaging; confirm exact attenuation range and max input power on the option datasheet matching the unit.

8156A121 Characteristics / Specifications

PARAMETER	VALUE
Model	8156A with option suffix
Base Model	8156A
Instrument Type	optical attenuator
Fiber Type	single mode
Remote Interface	GPIB
Form Factor	benchtop
Manufacturer	HP Agilent Keysight
Wavelength Class	telecom 1200 to 1650 nm class
Attenuation Range Class	0 to 60 dB class
Resolution Class	0.001 dB class
Insertion Loss Class	low insertion loss attenuator
Return Loss Class	high return loss
Connector Options	FC SC diamond class adapters
High Power Handling Class	high power
Low Power Handling Class	low power
Module Build Class	attenuator module build
Operating Temperature Class	0 C to 40 C
Storage Temperature Class	minus 40 C to 70 C
Line Power	100/120/220/240 V
Humidity Class	non condensing
Display	attenuation setpoint display
Calibration	wavelength calibrated attenuation
Duty	continuous optical test
Grounding	chassis ground
Cooling	convection

PARAMETER	VALUE
Mass Class	benchtop instrument
Attenuation	Range Class: 0 to 60 dB class
Storage temperature	Class: minus 40 C to 70 C
Operating temperature	Class: 0 C to 40 C
Humidity	Class: non condensing
Return loss	Class: high return loss

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	Class: minus 40 C to 70 C
Operating temperature	Class: 0 C to 40 C
Operating Temperature	Class: 0 C to 40 C
Humidity	Class: non condensing
Operating Temperature Class	0 C to 40 C
Storage Temperature Class	minus 40 C to 70 C
Line Power	100/120/220/240 V
Humidity Class	non condensing
Display	attenuation setpoint display
Calibration	wavelength calibrated attenuation
Duty	continuous optical test
Grounding	chassis ground
Cooling	convection
Mass Class	benchtop instrument Notes Files map 8156A-100 8156A-101 and 8156A-121 inventory options to the 8156A optical attenuator family. Confirm option-specific power rating on the unit label. Family identity from Agilent/HP 8156A optical attenuator literature. Option suffixes 100 101 121 select power and packaging; confirm exact attenuation range and max input power on the option datasheet matching the unit.

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.

performance optical attenuator for single-mode fiber systems. OEM 8156A family literature rates calibrated attenuation across telecom wavelengths with low insertion loss and GPIB control; option codes such as 100/101/121 select power handling and connector configurations.

Applications
Optical power leveling in DWDM component test, receiver sensitivity testing, and automated optical attenuation in fiber optic manufacturing.

Key Features
Programmable optical attenuation GPIB remote control Single mode fiber path Option coded power and connector variants Benchtop optical instrument packaging

Technical Specifications

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Line Power	100/120/220/240 V
Humidity Class	non condensing
Display	attenuation setpoint display

PARAMETER	VALUE
Calibration	wavelength calibrated attenuation
Duty	continuous optical test
Grounding	chassis ground
Cooling	convection
Mass Class	benchtop instrument

Notes

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Family identity from Agilent/HP 8156A optical attenuator literature. Option suffixes 100 101 121 select power and packaging; confirm exact attenuation range and max input power on the option datasheet matching the unit.

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.