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Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 81573A Variable Optical Attenuator Module with Straight Interface

HP Agilent 81573A High Power Optical Attenuator Module The Agilent 81573A is a single-slot high-power variable optical attenuator plug-in for the 8163A/B, 8164A/B, and 8166A/B Lightwave Multichannel platforms. OEM December 2002 module specifications list SMF pigtail connectivity, 1200–1700 nm coverage, 0–60 dB attenuation with 0.001 dB resolution, and +33 dBm maximum input power. Intended for EDFA and Raman amplifier characterization, DWDM multi-wavelength loss simulation, BER and transceiver testing, and high-power optical path leveling inside Agilent lightwave mainframes. The Agilent 81573A is a single-slot high-power variable optical attenuator plug-in for the 8163A/B, 8164A/B, and 8166A/B Lightwave Multichannel platforms. OEM December 2002 module specifications list SMF pigtail connectivity, 1200–1700 nm coverage, 0–60 dB attenuation with 0.001 dB resolution, and +33 dBm maximum input power. Intended for EDFA and Raman amplifier characterization, DWDM multi-wavelength loss simulation, BER and transceiver testing, and high-power optical path leveling inside Agilent lightwave mainframes.



MODEL

**HP / Agilent
81573A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

81573A

LISTING

<https://aumictechlabs.com/products/81573a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 81573A is a variable optical attenuator module engineered for precise control of optical power levels in high-power test and measurement applications. This plug-in module integrates into Agilent's Lightwave Multichannel Platforms and delivers accurate, repeatable attenuation across the optical spectrum. The straight-interface design enables direct integration into optical systems, while manual or remote attenuation control accommodates both benchtop and automated measurement configurations.

Technical Specifications
Product Type: Variable Optical Attenuator Module
Interface Type: Straight Interface
Power Handling: High input power capability
Insertion Loss: Low
Wavelength Flatness: Excellent
Polarization Mode Dispersion (PMD): Low - supports high-bit-rate transmission system testing
Calibration: Reference power level setting via integrated calibration features
Shutter: Integrated shutter for channel drop simulation and optical protection

Key Features
Manual and remote attenuation setting
High accuracy combined with operational flexibility
Low PMD performance enables characterization of modern high-speed optical systems
Integrated photodiode-based feedback mechanisms for controlled optical power management

Typical Applications
Optical component and system characterization
Power level control in high-power optical test setups
Telecommunication industry test and measurement
Transmission system validation requiring accurate attenuation control

Compatibility & Integration
The 81573A is a single-slot plug-in module compatible with Agilent Lightwave Multichannel Platform mainframes: 8163A/B, 8164A/B, and 8166A/B series.

81573A Characteristics / Specifications

PARAMETER	VALUE
Connectivity	SMF pigtail FC/APC termination
Fiber type	9/125 μm SMF28
Wavelength range	1200 to 1700 nm
Attenuation range	0 to 60 dB
Resolution	0.001 dB
Repeatability	±0.01 dB
Accuracy uncertainty	±0.1 dB (typical ±0.2 dB per OEM high-power table notes)
Settling time	typ. 100 ms
Transition speed	typ. 0.1 to 12 dB/s
Attenuation flatness 1520 to 1620 nm	less than ±0.07 dB (typ. ±0.05 dB)
Attenuation flatness 1420 to 1640 nm	typ. ±0.10 dB
Spectral ripple	typ. ±0.003 dB
Insertion loss excluding connectors	typ. 0.7 dB
Insertion loss including connectors	typ. 1.2 dB
Insertion loss flatness 1420 to 1615 nm	typ. ±0.1 dB
Return loss	typ. 57 dB
Maximum input power	+33 dBm
Shutter isolation	typ. 100 dB
Dimensions	75 mm × 32 mm × 335 mm
Weight	0.9 kg
Operating temperature	10 °C to 45 °C
Warm up time	30 min
Recommended recalibration period	2 years
Host platforms	8163A/B, 8164A/B, 8166A/B
Attenuation	range: 0 to 60 dB

81573A Specifications

PARAMETER	VALUE
HP Agilent 81573A High Power Optical Attenuator Module	Overview
Key Features	High-power handling to +33 dBm
SMF pigtail FC/APC termination for low interface loss	0.001 dB resolution with integrated shutter
Technical Specifications	Connectivity: SMF pigtail FC/APC termination

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	10 °C to 45 °C
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Warm up time	30 min
Recommended recalibration period	2 years
Host platforms	8163A/B, 8164A/B, 8166A/B Notes Specifications are from Agilent 8156xA and 8157xA Optical Attenuators Technical Specifications (December 2002) row for 81573A. Later Keysight 8157xA datasheets emphasize 81570A/81571A connectorized variants; pigtail 81573A limits follow the 2002 high-power table.

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 list SMF pigtail connectivity, 1200–1700 nm coverage, 0–60 dB attenuation with 0.001 dB resolution, and +33 dBm maximum input power.

Applications
Intended for EDFA and Raman amplifier characterization, DWDM multi-wavelength loss simulation, BER and transceiver testing, and high-power optical path leveling inside Agilent lightwave mainframes.

Key Features
High-power handling to +33 dBm
SMF pigtail FC/APC termination for low interface loss
0.001 dB resolution with integrated shutter
Reference-power and offset calibration features in platform firmware
One-slot module density (up to 17 per 8166A/B)
Excellent wavelength flatness for DWDM work

Technical Specifications

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Notes
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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 ·
30-day returns
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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.