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Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

JDS UNIPHASE

JDS Uniphase HA9 - HA91C+10KFP1

JDS Uniphase Optical Attenuators. Resolution: ** 0.01 dB (nominal), Accuracy: ** ± 0.1 dB.

MODEL

**JDS Uniphase
HA9-
HA91C+10KFP1**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

**HA9-
HA91C+10KFP1**

LISTING

<https://aumictechlabs.com/products/ha9-ha91c-10kfp1-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The JDS Uniphase HA9-HA91C+10KFP1 is a programmable optical attenuator engineered for precise attenuation of optical signals in laboratory and field testing environments. This instrument delivers 100 dB attenuation range with 0.01 dB resolution and repeatability, supporting input power up to 1000 mW (30 dBm) across single-mode and multimode fiber. It excels in power meter calibration, link loss simulation, bit error rate testing, and DWDM system characterization.

Technical Specifications Attenuation Range: 100 dB Resolution: 0.01 dB (nominal) Repeatability: 0.01 dB Accuracy: ± 0.1 dB Wavelength Range: 1200–1700 nm (standard); 750–1700 nm available (HA9W variant with 60 dB reduced range) Wavelength Dependence: ± 0.05 dB across 1530–1625 nm Polarization Dependent Loss (PDL): ≤ 0.03 dB (typical) Return Loss: > 60 dB (internal reflections minimized) Input Power: Up to 1000 mW (30 dBm) Fiber Compatibility: Single-mode and multimode (50/125 μ m) Key Features Fiber type selection via front panel keyboard, GPIB, or RS232 SCPI/HP8156A command compatibility Optional 1:2 optical fiber switch (SW12) for dual input/output selection Interchangeable couplers: 2/98, 10/90, 30/70, or 50/50 configurations 5V

driver output for external/internal switch control Class 1 safety classification Typical Applications Power meter linearity calibration Analog transmission and bit error rate testing Fiber optic link loss simulation EDFA output power characterization DWDM system analysis Multi-channel AM and high bit-rate PCM systems Compatibility & Integration The HA91C+10KFP1 accepts optional built-in couplers and switches, enabling modular configuration for specific test setups. External devices integrate via front panel access. Standard interfaces support lab automation and remote instrument control.

Features & description

From manufacturer datasheet

Built-in beam block greater than 90 dB

GPIB and RS-232 SCPI remote control Optional couplers and 1:2 switch Technical Specifications
Instrument Family: JDS Uniphase HA9 Operating Wavelength Range: 1200 to 1700 nm Attenuation
Range: 100 dB Attenuation Resolution: 0.01 dB Attenuation Repeatability: plus or minus 0.01 dB
Attenuation Change Rate 0 To 100 dB: less than 2.5 s Attenuation Accuracy: plus or minus 0.1 dB
Insertion Loss Single-Mode: less than 1.5 dB (excludes connectors switch coupler) Insertion Loss
Multimode 50/125: less than 2.2 dB Insertion Loss Multimode Other: less than 2.9 dB Return Loss SM
Standard: greater than 45 dB Return Loss SM Analog Option: greater than 60 dB Return Loss MM
50/125: greater than 35 dB Return Loss MM Other: greater than 30 dB

Polarization Dependent Loss Maximum: 0.08 dB

Beam Block Isolation: greater than 90 dB Maximum Optical Input Power: 200 mW Wavelength
Dependence 0 To 20 dB Attenuation HA2 Class Reference: plus or minus 0.05 dB (1530-1625 nm table)
AC Input: 90 to 240 Vac 50 to 60 Hz Power Consumption Maximum: 80 VA DimensionsWxHxDClass:
21.2 × 8.9 × 35.5 cm half-rack class Weight Class: about 3.75 to 4 kg Operating Temperature: 0 to 40 C
Storage Temperature: minus 40 to 60 C Remote Interfaces: GPIB IEEE-488 and RS-232 Command Set:
SCPI / HP8156A compatible class Optional Coupler Codes: 50/50 10/90 30/70 2/98 Optional Switch: 1:2
SW12 Notes HA91C+10KFP1 configuration of HA9; numeric rows from HA9 OEM table.

HA9HA91C10KFP1 Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	JDS Uniphase HA9
Operating Wavelength Range	1200 to 1700 nm
Attenuation Range	100 dB
Attenuation Resolution	0.01 dB
Attenuation Repeatability	plus or minus 0.01 dB
Attenuation Change Rate 0 To 100 dB	less than 2.5 s
Attenuation Accuracy	plus or minus 0.1 dB
Insertion Loss Multimode 50/1	less than 2.2 dB
Insertion Loss Multimode Other	less than 2.9 dB
Return Loss SM Standard	greater than 45 dB
Return Loss SM Analog Option	greater than 60 dB
Return Loss MM 50/1	greater than 35 dB
Return Loss MM Other	greater than 30 dB
Polarization Dependent Loss Maximum	0.08 dB
Beam Block Isolation	greater than 90 dB
Maximum Optical Input Power	200 mW
Wavelength Dependence 0 To 20 dB Attenuation HA2 Class Reference	plus or minus 0.05 dB (1530-1625 nm table)
AC Input	90 to 240 Vac 50 to 60 Hz
Power Consumption Maximum	80 VA
DimensionsWxHxDCClass	21.2 × 8.9 × 35.5 cm half-rack class
Weight Class	about 3.75 to 4 kg
Operating Temperature	0 to 40 C
Storage Temperature	minus 40 to 60 C
Remote Interfaces	GPIB IEEE-488 and RS-232
Command Set	SCPI / HP8156A compatible class

PARAMETER	VALUE
Wavelength range	1200 to 1700 nm
Attenuation	Range: 100 dB
Return loss	SM Standard: greater than 45 dB

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 to 60 C
Operating temperature	0 to 40 C
Operating Temperature	0 to 40 C
Remote Interfaces	GPIB IEEE-488 and RS-232
Command Set	SCPI / HP8156A compatible class

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

Specifications

PARAMETER	VALUE
Instrument Family	JDS Uniphase HA9
Operating Wavelength Range	1200 to 1700 nm
Attenuation Range	100 dB
Attenuation Resolution	0.01 dB
Attenuation Repeatability	plus or minus 0.01 dB
Attenuation Change Rate 0 To 100 dB	less than 2.5 s
Attenuation Accuracy	plus or minus 0.1 dB

Insertion Loss Single-Mode: less than 1.5 dB (excludes connectors switch coupler)

Specifications

PARAMETER	VALUE
Insertion Loss Multimode 50/125	less than 2.2 dB
Insertion Loss Multimode Other	less than 2.9 dB
Return Loss SM Standard	greater than 45 dB
Return Loss SM Analog Option	greater than 60 dB
Return Loss MM 50/125	greater than 35 dB
Return Loss MM Other	greater than 30 dB
Polarization Dependent Loss Maximum	0.08 dB
Beam Block Isolation	greater than 90 dB
Maximum Optical Input Power	200 mW

Wavelength Dependence 0 To 20 dB Attenuation HA2 Class Reference: plus or minus 0.05 dB (1530-1625 nm table)

Specifications

PARAMETER	VALUE
AC Input	90 to 240 Vac 50 to 60 Hz
Power Consumption Maximum	80 VA
DimensionsWxHxDClass	21.2 x 8.9 x 35.5 cm half-rack class

PARAMETER	VALUE
Weight Class	about 3.75 to 4 kg
Operating Temperature	0 to 40 C
Storage Temperature	minus 40 to 60 C
Remote Interfaces	GPIO IEEE-488 and RS-232
Command Set	SCPI / HP8156A compatible class

Optional Coupler Codes: 50/50 10/90 30/70 2/98
Optional Switch: 1:2 SW12

Notes
HA91C+10KFP1 configuration of HA9; numeric rows from HA9 OEM table.

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.