

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8156A

The Keysight (formerly Agilent / Hewlett-Packard) 8156A is a high-performance programmable optical attenuator designed for single-mode and 50 μm multimode fiber applications in telecommunications R&D and manufacturing. It offers a 60 dB attenuation range with 0.001 dB resolution, operating continuously without ranging. Accommodating a maximum input power of +23 dBm across a 1200 nm to 1650 nm wavelength range, the 8156A can be heavily customized through various hardware options to provide tailored return loss characteristics, built-in monitor paths, and specific connector interfaces.

SPECIFICATIONS

General

Interfaces	GPIB
Warm-up Time	1 hour

Physical

Power Supply	100-240 Vrms $\pm$ 10%, 50/60 Hz, 60 VA max
Operating Temperature	0 to +55 °C °C
Dimensions (W×H×D)	212.3 × 89 × 345 mm mm
Weight	5.3 kg kg

Optical Characteristics

Wavelength Range	1200 nm to 1650 nm
Fiber Type	9/125 μm single-mode; 50/125 μm multimode (configuration dependent)
Maximum Input Power	+23 dBm
Return Loss	60 / 45 / 35 dB (Single-mode, option dependent); 22 dB (Multimode)

Attenuation Performance

Attenuation Range	60 dB
Attenuation Resolution	0.001 dB
Attenuation Ranging	Continuous (without ranging)

Shutter and Monitor Options

Monitor Paths	Built-in monitor paths (Options 121, 221)
---------------	---

Interfaces and Connectivity

Optical Connector Interface	Straight contact (Options 100, 101, 121, 350); Angled contact (Options 201, 221)
Remote Control Interfaces	GPIB (all modes and parameters fully programmable)

Performance

Attenuation Transition Time	< 20 ms
-----------------------------	---------

Environmental

Storage Temperature	-40 to +70 °C
Relative Humidity	Up to 95% RH (0 °C to +40 °C)

TECHNOLOGY

Programmable Optical Attenuation

APPLICATIONS

Fiber Optic R&D, Production Test, Fast Telecommunication Systems

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.