

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8495H

The Keysight (formerly Agilent/HP) 8495H is a programmable step attenuator operating from dc to 18 GHz, offering an attenuation range of 0 to 70 dB in 10 dB steps. It features exceptional repeatability (typically 0.01 dB) and a reliable magnetic-latching design with a switching life of over 5 million cycles per section. Available with a choice of RF connectors and coil control voltages, its fast 20 ms switching time makes it ideal for automated test systems and high-precision RF/microwave measurement setups.

SPECIFICATIONS

Physical

Operating Temperature	0 to +55 °C °C
Weight	0.312 kg kg

General Specifications

Frequency Range	dc to 18 GHz
Attenuation Range	0 to 70 dB
Attenuation Step Size	10 dB
Impedance	50 Ω

RF Performance

Insertion Loss (0 dB state)	0.4 dB + 0.07 dB/GHz
Maximum SWR (dc to 8 GHz)	1.35
Maximum SWR (8 to 12.4 GHz)	1.5
Maximum SWR (12.4 to 18 GHz)	1.7
Attenuation Repeatability	0.03 dB maximum (0.01 dB typical)

Power Handling

Maximum Average Input Power	1 W
Maximum Peak Input Power	100 W

Switching & Drive Characteristics

Actuator Type	Magnetic Latching
Switching Speed	20 ms maximum (including contact settling)
Switching Life (cycles)	> 5 million cycles per section

Connectivity & Interfaces

RF Connector Options	Type-N female, SMA female, or APC-7 (option dependent)
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Options & Configurations

Supply Voltage Options	5 Vdc, 15 Vdc, or 24 Vdc (Options 011, 015, 024)
Interconnect Kits	11716A/B/C (for series connection with 8494/6/7 attenuators)

Environmental

Storage Temperature	-40 to +75 °C
Humidity	95% RH at 40 °C
Vibration	0.05 in. double amplitude, 10 to 55 Hz
Shock (Non-operating)	50 G, 11 ms, half-sine

Control & Programming

Minimum Drive Pulse Width	20 ms
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Performance

Attenuation Accuracy (10 dB)	±0.5 dB
Attenuation Accuracy (20 dB)	±0.7 dB
Attenuation Accuracy (30 dB)	±0.9 dB
Attenuation Accuracy (40 dB)	±1.2 dB
Attenuation Accuracy (50 dB)	±1.5 dB
Attenuation Accuracy (60 dB)	±1.8 dB
Attenuation Accuracy (70 dB)	±2.1 dB

Physical & Design

Number of Sections	3 (10, 20, 40 dB)
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TECHNOLOGY

Programmable Step Attenuator

APPLICATIONS

RF & Microwave Test

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