

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8495A

The Keysight (formerly Agilent / HP) 8495A is a manual step attenuator designed for DC to 4 GHz coaxial applications. It offers exceptional repeatability and reliability, with attenuation selectable in 10 dB steps from 0 to 70 dB. Precision gold-plated leaf springs ensure a long operating life of over 5 million cycles per section and high repeatability.

SPECIFICATIONS

Physical

Operating Temperature	0 to +55 °C °C
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RF Performance

Frequency Range	DC to 4 GHz
Attenuation Range	0 to 70 dB
Attenuation Step Size	10 dB
Insertion Loss (at 0 dB)	0.4 dB + 0.07 dB/GHz
Insertion Loss at 4 GHz	0.68 dB
Maximum SWR	1.35
Maximum RF Input Power (Average)	1 W
Maximum RF Input Power (Peak)	100 W (pulse width ≤ 10 μs, duty cycle ≤ 1%)
Nominal Impedance	50 Ω
Attenuation Accuracy (10 dB)	±0.2 dB
Attenuation Accuracy (20 dB)	±0.4 dB
Attenuation Accuracy (30 dB)	±0.5 dB
Attenuation Accuracy (40 dB)	±0.7 dB
Attenuation Accuracy (50 dB)	±0.8 dB
Attenuation Accuracy (60 dB)	±1.0 dB
Attenuation Accuracy (70 dB)	±1.2 dB
Maximum Peak Power Pulse Width	10 μs
Maximum Peak Power Duty Cycle	0.01
Number of Sections	3

Mechanical & Physical

RF Connector Options	Type-N female / SMA female / APC-7
Actuation Type	Manual
Operating Life	5 million cycles per section
Repeatability (Maximum)	0.03 dB (up to 5 million cycles)
Repeatability (Typical)	0.01 dB

Environmental & Reliability

Non-Operating Temperature Range	-40 to +75 °C
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Ordering & Configuration

Option 001	Type-N female RF connectors
Option 002	SMA female RF connectors
Option 003	APC-7 RF connectors
Option 890	NIST traceable SWR and attenuation calibration data
Compatible Interconnect Kits	Agilent 11716A/B/C (for cascading step attenuators)

Environmental

Operating Altitude	4600 m
Storage Altitude	15200 m
Vibration Limit	0.38 mm double amplitude, 5 to 55 Hz
Shock Limit	100 g, 6 ms duration
Humidity Limit	95% RH @ 40 °C

General

Control Type	Manual rotary knob
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RF Connectors

Connector Gender	Female (Type-N, SMA options) or Sexless (APC-7 option)
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Options

Option UK6	Commercial calibration certificate with test data
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Performance

Attenuation Temperature Coefficient	< 0.0001 dB/dB/°C
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TECHNOLOGY

Coaxial Step Attenuator

APPLICATIONS

RF and microwave signal attenuation

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