

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8495G

The Keysight Technologies (formerly Agilent HP) 8495G is a programmable electromechanical coaxial step attenuator designed for automated RF and microwave testing. Operating from DC to 4 GHz, it provides attenuation from 0 to 70 dB in 10 dB steps. It features precision gold-plated leaf springs for exceptional repeatability (typically 0.01 dB) and a long operating life of over 5 million cycles per section. Solenoid drive control operates on a nominal 24 Vdc, with multiple RF and control connector configurations available.

SPECIFICATIONS

Physical

Power Supply	20 to 30 Vdc (24 Vdc nominal), 125 mA per section
Operating Temperature	0 to +55 °C °C
Dimensions (W×H×D)	52.4 mm × 42.7 mm × 149 mm (SMA) / 162 mm (APC-7) / 171 mm (Type-N) mm
Weight	0.34 to 0.45 kg (connector dependent) kg

RF Specifications

Frequency Range	DC to 4 GHz
Attenuation Range	0 to 70 dB
Attenuation Steps	10 dB
Nominal Impedance	50 Ω
Number of Sections	4
Section Attenuation Values	10 dB, 20 dB, 20 dB, 20 dB
Maximum Insertion Loss (at 0 dB)	0.4 dB + 0.07 dB/GHz
Maximum SWR	1.35
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

Power Handling & Reliability

Maximum RF Input Power (Average)	1 W
Maximum RF Input Power (Peak)	100 W
Maximum Peak Power Pulse Width	10 μs
Switching Life (Minimum Operations)	5 million cycles per section
Repeatability (Maximum)	0.03 dB over life
Repeatability (Typical)	0.01 dB

Control & Electromechanical Specifications

Actuation Type	Solenoid (Electromechanical)
Solenoid Nominal Voltage	24 Vdc
Solenoid Operating Voltage Range	20 to 30 Vdc
Solenoid Switching Current	125 mA per section (at 24 Vdc)
Switching Speed (Maximum)	20 ms (including contact settling)

Mechanical Characteristics

RF Connector Types Available	Type-N female, SMA female, or APC-7
Weight (SMA Version)	0.34 kg (12 oz)
Weight (Type-N Version)	0.45 kg (16 oz)
Weight (APC-7 Version)	0.40 kg (14 oz)

Environmental Specifications

Storage Temperature Range	-40 to +75 °C
---------------------------	---------------

Ordering Information & Options

Option 002 (RF Connectors)	SMA female RF connectors
Option 003 (RF Connectors)	APC-7 RF connectors
Option 008 (Control Connection)	8-inch ribbon cable with 14-pin DIP header

Control & Power

Solenoid Supply Options	24 V (Standard / Option 024), 15 V (Option 015), 5 V (Option 011)
Solenoid Coil Resistance	185 Ω (24 V), 75 Ω (15 V), 17 Ω (5 V)

TECHNOLOGY

Electromechanical Solenoid Coaxial Step Attenuator

APPLICATIONS

RF and Microwave Signal Attenuation, Automated Test Systems (ATE), Signal Level Calibration

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