

High Voltage Loads and Attenuators

Our high voltage loads are designed for the performance measurement of pulse generators. They include an attenuator of 54 dB. Increased attenuation can be achieved by adding an optional attenuator at the output of the device.

- Flat frequency response over a wide bandwidth
- Frequency response down to 0 Hz
- Compensation software available for frequency range extension



SPECIFICATIONS		
Reference	HVAT50K	HVAT200K
Type	resistive load, attenuator included	resistive load, attenuator included
Maximum peak voltage (load mode)	50 kV, for pulse \leq 1 ns 29 kV, for pulse \leq 600 ns	200 kV, for pulse \leq 1 ns 125 kV, for pulse \leq 23 ns 50 kV, for pulse \leq 100 ns 29 kV, for pulse \leq 600 ns
Frequency response	DC to 200 MHz (-3 dB) DC to 4 GHz ¹⁾	DC to 200 MHz (-3 dB) DC to 1.6 GHz ¹⁾
S ₁₁	< -15 dB (up to 200 MHz) < -10 dB (up to 4 GHz)	< -15 dB (up to 200 MHz) < -10 dB (up to 1.6 GHz)
Impedance	50 ohm	50 ohm
Attenuation	54 dB \pm 1 dB (nominal)	54 dB \pm 1 dB (nominal)
Input connector	HVM50K (female) Montena proprietary	HVM200K (female) Montena proprietary
Output connector	N (female)	N (female)
Maximum average power	20 W	20 W
Maximum energy	1.7 kJ	1.7 kJ
Working temperature	10 - 50 °C	10 - 50 °C
Weight (alone / with support)	2.5 kg / 2.7 kg	3.8 kg / 4.4 kg
Size (L x diam.)	256 x 90 mm	343 x 90 mm

¹⁾ with software compensation

Ordering information

TYPE	DESCRIPTION
HVAT50K	High voltage coaxial 50 ohm load, including an attenuator of 54 dB, max. voltage: 50 kV for 1 ns pulses, connectors: HVM50K(f) – N(f)
HVAT200K	High voltage coaxial 50 ohm load, including an attenuator of 54 dB, max. voltage: 200 kV for 1 ns pulses, connectors: HVM200K(f) – N(f)

Related products / accessories

TYPE	DESCRIPTION
HVK50-O-xx	High voltage coaxial cable, type RG217/U, connectors: HVM50K(m) - open end xx = the cable length; available lengths are 0.5, 1 and 2 m
HVM50K-CA	High voltage coaxial connector, male, cable mounting (RG217/U), max. voltage 75 kV for 1 ns pulses
HVK200-O-xx	High voltage coaxial cable, type RG218/U, connectors: HVM200K(m) - open end xx = the cable length; available lengths are 0.5, 1 and 2 m
HVM200K-CA	High voltage coaxial connector, male, cable mounting (RG218/U), max. voltage 200 kV for 1 ns pulse
PULSELab	Pulse measurement and processing software application, Life time license for installation on one PC