

HVS HIGH VOLTAGE STANDARD

- *UNIQUE MODULAR DESIGN*
- *INNOVATIVE GUARDED STRUCTURE*
- *IMPROVED RUGGEDNESS FOR TRANSPORT*
- *HIGH STABILITY, HIGH ACCURACY*



HVS with two 50 M sections for 100 kV

Ohm-Labs new HVS High Voltage Standard incorporates innovations based on years of manufacturing and calibrating precision high voltage dividers.

As with the former HVA divider, the HVS uses precision matched resistors for high accuracy; it is a modified Park divider structure.

The low resistance section is a 10 K standard. It may be removed for separate calibration, or exchanged with a different standard to provide other ratios.

With the low resistance standard removed, the HVS may be used as a high voltage resistor.

An innovative guard structure reduces leakage errors by shielding each resistor at its nominal voltage. The HVS guard structure has a nominal resistance of 500 megohms.

The guard structure forms a secondary divider with a separate 10 K output resistor to monitor voltage during tests.

Larger and more secure ground connections reduce resistance to ground.

The high voltage resistors are enclosed in an acrylic tube, protecting them from dust and contamination. A low voltage fan exhausts heat out the top of the divider.

The base HVS unit includes one 50 megohm stack rated up to 50 kV dc, one 10 K standard and a top toroid.

Additional HVS-A adder units include one 50 megohm stack and an intermediate toroid. Adder units are easily stacked to increase the voltage range.

The HVS toroid, high voltage section, base and resistance standard disassemble easily for safe transport. The HVS does not need a special transport container.

ISO17025 accredited calibration is included up to 150 kV dc and up to 100 kV ac (60 Hz rms).

Model	Max dc	Max ac
HVS	50 kV	35 kV
HVS-A	50 kV	35 kV
Accuracy*	< 0.01 %	< 0.1 %

*Maximum deviation from mean of measured ratio

Environmental:

Use: 23 +/-5 °C, 10-70 %RH

Storage: 0-50°C, 5-95 %RH

Physical:

HVS: 60x60x40 cm (24x24x16 in), 18 kg (40 lbs)

HVS-A: 50x50x35 cm (20x20x14 in), 11 kg (23 lbs)

