

HVS HIGH VOLTAGE STANDARD

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

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 an Ohm-Labs 100-Series Standard Resistor. 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 ten times that of the main divider.

The guard structure forms a secondary divider with a separate 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.

The base HVS unit includes one high voltage resistor stack rated up to 50 kV dc, one ratio resistance standard and a top toroid.

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



HVS with two sections for 100 kV

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 rms ac, at either 50 or 60 Hz.

Model	Max dc	Max ac
HVS-50	50 kV	35 kV
HVS-100	100 kV	70 kV
HVS-150	150 kV	105 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)

