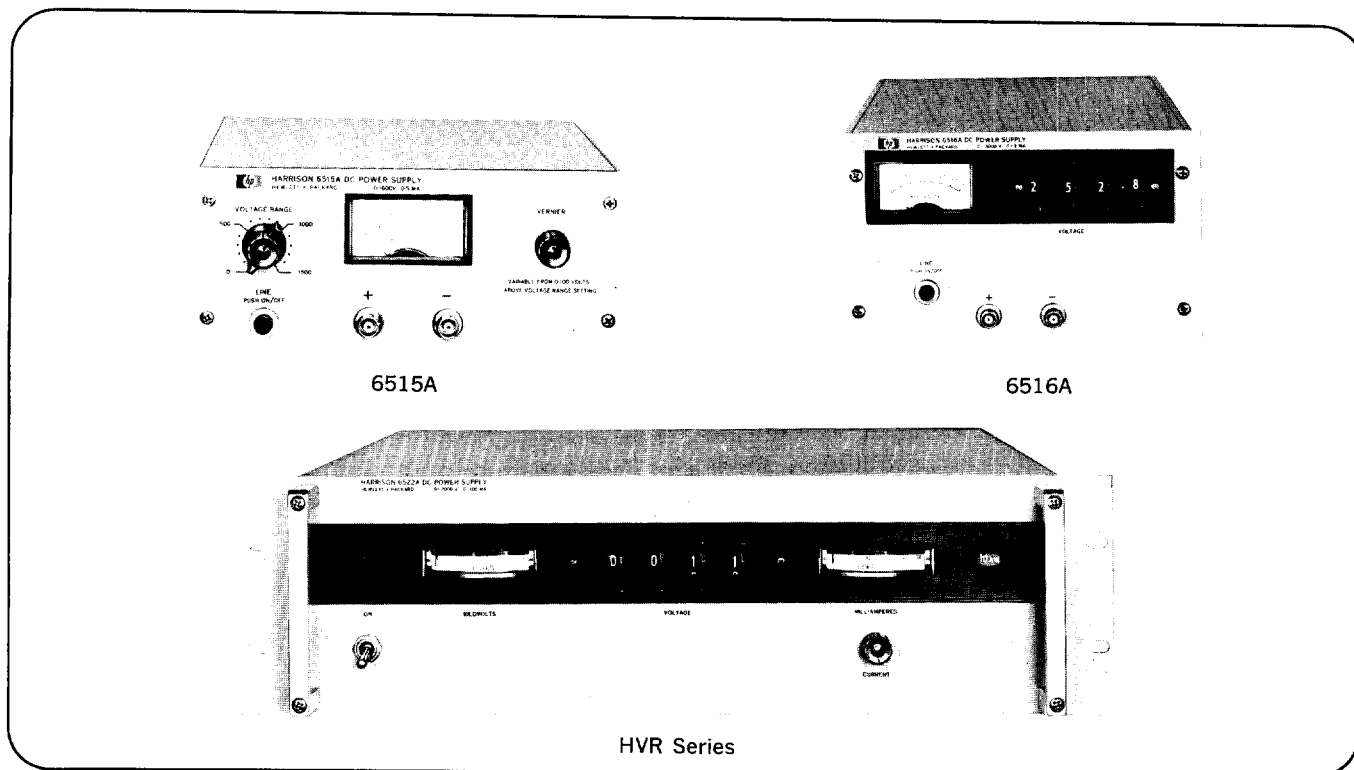




HIGH VOLTAGE SUPPLIES

HVB, HVR Series

Models 6515A—6525A



HVB SERIES—This series has two compact, dc regulated bench supplies offering up to 3 KV in moderate currents. These high-voltage supplies offer low cost, portability, and high performance for experimenting and circuit developing at the bench. Low ripple and impedance are achieved by a series regulator feedback circuit using a temperature-compensated zener diode for reference. The design also includes short-circuit protection and current-limiting. Output is floating, giving choice of negative or positive voltages up to 1 KV off ground. High performance design makes these supplies particularly suited for photomultiplier application, as well as for TWT's, CRT's, gas flow tubes, proportional counter tubes, and rapid high-voltage single-trip electrophoresis. Circuits are all solid-state.

HVR SERIES—These three supplies are all tightly regulated (0.005%) and provide sufficient output current for many devices not capable of being powered from conventional low current, high voltage supplies. Such devices would include power TWT's, Klystrons, continuous wave magnetrons, power gas lasers, and electron beam welding devices. Circuitry includes constant voltage/constant current operation with automatic crossover. Thumbwheel voltage controls give you 0.002% resolution. Two meters—one for voltage, one for current—are standard with each model. As in the HVB Series, these supplies are short-circuit proof. With floating output, you have the option of negative or positive voltages up to 2 KV off ground. Circuits are all solid-state.

| | | HVB SERIES | | HVR SERIES | | |
|---|------------------|--|--|---|---------------------|--------------------|
| Model | | 6515A | 6516A | 6521A | 6522A | 6525A |
| DC output | voltage | 0-1600 V | 0-3000 V | 0-1000 V | 0-2000 V | 0-4000 V |
| | current | 0-5 mA | 0-6 mA | 0-200 mA | 0-50 mA | 0-50 mA |
| AC input | | 115 V \pm 10%, 60 Hz | 115 V \pm 10%, 57-63 Hz | 115 V ac \pm 10%, 50-500 Hz | | |
| Load regulation | constant voltage | 0.01% + 16 mV | | 0.005% or 20 mV | | |
| | constant current | --- | | 2% or 1 mA | | |
| Line regulation (for a 10% change in voltage) | constant voltage | 0.01% + 16 mV | | 0.005% or 20 mV | | |
| | constant current | --- | | 1 mA | | |
| Ripple and noise (peak-to-peak) | constant voltage | 2 mV (5 mV p-p) | | 1 mV | | |
| | constant current | --- | | 2 mA | 1 mA | 500 μ A |
| Temperature coefficient | constant voltage | 0.02% + 2 mV | | 0.012% + 1 mV | | |
| | constant current | --- | | 0.2% + 0.2 mA | 0.2% + 0.1 mA | 0.2% + 0.05 mA |
| Stability | constant voltage | 0.05% + 5 mV | | 0.036% + 3 mV | | |
| | constant current | --- | | 0.25% + 0.5 mA | 0.25% + 0.2 mA | 0.25% + 0.12 mA |
| Meters | | 0-1800 V | 0-3500 V | 0-1 kV and 0-200 mA | 0-2 kV and 0-200 mA | 0-4 kV and 0-50 mA |
| Controls | | 100 V steps with intermediate vernier for 100 mV resolution. | 4-digit thumbwheel, to 1-Volt resolution. | voltage control—3 decade thumbwheel switches plus thumbwheel vernier with 0.002% resolution, current control—single-turn potentiometer. | | |
| Dimensions | | 3½" (8.9 cm) H x 8½" (21.6 cm) W x 11-13/16" (30 cm) D. | 5½" (12.7 cm) H x 8½" (21.6 cm) W x 16" (40.6 cm) D. | 5½" H x 18" D x 19" W (13.3 x 45.7 x 48.3 cm) | | |
| Options | | 28 (p. 561) | 05,13 | | | |
| Weight (net/shipping) | | 12/15 lbs (5.44/6.8 kg) | 17/20 lbs (7.71/9.07 kg) | 50/60 lbs (22.5/27 kg) | | |
| Price | | \$235 | \$295 | \$750 | \$750 | \$750 |

Note: See Model 6110A on p. 566.