



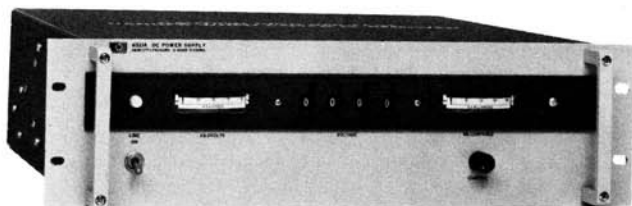
# POWER SUPPLIES

## Special Purpose: High Voltage Output

### Models 6515A-6525A

- Short circuit proof
- Precise voltage control—four decade thumbwheel or switch and vernier
- Convection cooling

- Floating output—can be used as a positive or negative source
- Front-panel meters
- Bench or rack mounting



6521A, 6525A



6515A



6516A

### Description

#### 6521A, 6525A

This series of high performance power supplies has broad application both in the laboratory and in the system. They have sufficient output current to power devices such as TWT's, klystrons, magnetrons, backward-wave oscillators, high-power gas lasers, electron-beam welding devices, etc. Output voltage is set easily and precisely by a three-decade thumbwheel switch plus a thumbwheel vernier providing 0.002% resolution. In constant voltage operation, a single-turn current control allows the current limit point to be set to any value within the current rating. In constant current operation, the current control varies the output current while the voltage controls (thumbwheels) provide an adjustable voltage limit. The supplies are protected against reverse voltage that could be generated by an active load. Protection from reverse current requires pre-loading the supply with a dummy load to ensure that the supply outputs current through the entire operating cycle of the load. Either the positive or negative terminal may be grounded or the supply may be operated floating at up to 200 V above ground.

**Power:** 115 V ac  $\pm$  10%, 48–440 Hz, 4 A, 270 W (230 V ac available on special order).

**Weight:** net, 19 kg (42 lb). Shipping, 28.5 kg (63 lb).

**Size:** 133 H x 483 W x 457 mm D (5.25" x 19" x 18").

#### 6515A and 6516A

These high-voltage power supplies are lower in cost and output power than the 6521A-6525A supplies. Their small size, low price, and short-circuit-proof operation make them excellent high-voltage laboratory supplies, or high-voltage systems supplies for lower current requirements.

Model 6515A employs a sixteen-position rotary switch and a ten-turn vernier control to adjust the output voltage. The rotary switch selects output voltage increments from 1 to 1500 V in 100-volt steps; the vernier control permits fine adjustment (100 mV resolution) over any 100-volt span. Model 6516A uses a three-decade thumbwheel switch plus a thumbwheel vernier for convenient and precise (1.0 V resolution) output voltage control.

Non-adjustable current-limit protection is provided on both models. On Model 6516A, the current-limit point is fixed at approximately 8 mA. On Model 6515A, the current limit value varies with the selected output voltage range as follows (voltage range/current limit): 0-300 V/7.5 mA, 400-700 V/65 mA, 800-1100 V/32 mA, 1200-1500 V/25 mA. Both supplies are protected against reverse voltage that could be generated by an active load. Pre-loading is necessary to protect the supplies from reverse current. Either the positive or negative terminal may be grounded or the supply may be operated floating at up to 1000 V above ground. Units are packaged in half-rack-width cases. They may be bench operated or mounted individually or in pairs using accessory rack-mounting kits.

**Power:** 6515A: 115 V ac  $\pm$  10%, 60  $\pm$  0.3 Hz, 016 A, 19 W. (230 V ac available on special order) 6516A: 115 V ac  $\pm$  10%, 57-63 Hz, 1 A, 40 W.

**Weight:** 6515A: net, 4.1 kg (9 lb). Shipping, 5.0 kg (11 lb). 6516A: net, 7.7 kg (17 lb). Shipping, 9.5 kg (21 lb).

**Size:** 6515A, 89 H x 216 W x 299 mm D (3.50" x 8.50" x 11.75"). 6516A, 133 H x 216 W x 406 mm D (5.25" x 8.50" x 16").

### Option Descriptions

**019:** 230 V ac  $\pm$  10%, 50  $\pm$  0.3 Hz, single phase input. Consists of replacing input transformer, line cord and fuse.

Option 019 applies only to models 6515A  
6516A

### Price

add \$51  
add \$150

**J08:** model 6521A may be operated on 230 V ac, 48-63 Hz, only through the use of an external accessory 230 V to 115 V step-down transformer. Suitable transformer with built-in receptacle, line cord and grounding-type plug may be ordered with the power supply as a Special Option. Contact your local HP Field Engineer for ordering information.

**J13:** same as J08, for model 6525A

**910:** one additional operating and service manual shipped with each power supply

#### 6515A-6516A

#### 6521A-6525A

#### Accessories

**14513A:** rack kit for one 6515A \$56  
**14523A:** rack kit for two 6515A's \$30  
**14515A:** rack kit for one 6516A \$61  
**14525A:** rack kit for two 6516A's \$35

add \$7.50  
add \$10.00

RATINGS		PERFORMANCE										GENERAL		
DC Output		Model	Load Effect		Source Effect		PAR (rms/p-p)		Drift		Resolution		Options	Price
Volts	mA		Voltage	Current	Voltage	Current	Voltage	Current	Voltage	Current	V	C		
0-1000	0-200	6521A	0.005% or 20 mV	2% or 1 mA	0.005% or 20 mV*	1 mA	1 mV/150 mV	2 mA rms	0.036% + 3 mV	0.25% + 0.5 mA	20 mV	0.6 mA	J08	\$2790
0-1600	5	6515A	0.01% or 16 mV*	**	0.01% or 16 mV*	**	2mV/15 mV	**	0.05% + 5 mV	**	100 mV	**	15, 19	\$865
0-3000	6	6516A	0.01% or 16 mV*	**	0.01% or 16 mV*	**	1 mV/15 mV	**	0.05% + 5 mV	**	1 V	**	19	\$1320
0-4000	0-50	6525A	0.005% or 20 mV*	2% or 1 mA*	0.005% or 20 mV	1 mA	1 mV/150 mV	500 $\mu$ A rms	0.036% + 3 mV	0.25% + 0.12 mA	80 mV	0.15 mA	J13	\$2790

\*whichever is larger.

\*\* This feature is not available.