

Data Sheet

Single Output DC Power Supplies

Models 1740B, 1743B, 1744A, 1745A & 1746B

These power supplies have all of the great features you would expect B+K Precision power supplies to have and some new features not normally seen on power supplies in this price range. The output-shortening button allows the user to short the output terminals to set the current limit.



Model 1744A



Model 1745A

Specifications	1740B	1743B	1746B	1744A	1745A
Output Voltage	0-60 V	0-35 V	0-16 V	0-35 V	0-35 V
Output Current	0-4 A	0-6 A	0-10 A	0-10 A	0-10 A
Constant Voltage Operation					
Voltage Regulation	Line (120 VAC $\pm 10\%$) $< 0.2\% + 2 \text{ mV}$ Load (no load - full load) $< 0.04\% + 2 \text{ mV}$				
Recovery Time	$< 100 \mu\text{s}$				
Ripple & Noise	1 mV rms (Typical)				
Temperature Coefficient	$< 300 \text{ ppm}/^\circ\text{C}$				
Constant Current Operation					
Adjustable Current Limit	5% to 100%				
Current Regulation	Line (120 VAC $\pm 10\%$) $< 0.4\% + 5 \text{ mA}$ Load $< 0.4\% + 5 \text{ mA}$				
Current Ripple	$< 3 \text{ mArms}$				
Metering					
Type	2-Analog	Dual 4-digit LED	2-Analog	2-Analog	Dual 4-digit LED
Voltmeter Range	0-64 V	0-99.99 V (green)	0-16 V	0-40 V	0-99.99 V
Voltmeter Accuracy	$\pm 2.5\%$	$\pm (0.5\% + 9 \text{ digits})$	$\pm 2.5\%$	$\pm 2.5\%$	$\pm (0.7\% + 9 \text{ digits})$
Ammeter Range					
High Range	0-4.4 A	0-9.999 A (red)	0-11 A	0-11 A	0-9.999 A
Low Range	0-1.1 A	-	0-2.2 A	0-2.2 A	-
Ammeter Accuracy	$\pm 2.5\%$	$\pm (0.5\% + 9 \text{ digits})$	$\pm 2.5\%$	$\pm 2.5\%$	$\pm (0.7\% + 9 \text{ digits})$
General					
Overload Protection	Current limiting, reverse polarity, overvoltage, short circuit				
AC Input	120/220 VAC $\pm 10\%$, 50/60 Hz				
Power Consumption	450 W	420 W	380 W	560 W	560 W
Operating Temperature	32 to 104 $^\circ\text{F}$ (0 to 40 $^\circ\text{C}$), $< 75\%$ R.H.				
Storage Temperature	5 to 158 $^\circ\text{F}$ (-15 to +70 $^\circ\text{C}$), $< 85\%$ R.H.				
Dimensions (H x W x D)	5.7" x 10.5" x 15" (145 x 267 x 381 mm)				
Weight	23 lbs (10.4 kg)		20 lbs (9.1)	27 lbs (12.2)	
Two-Year Warranty					
Included Accessories	Instruction manual , spare fuse and power cord				

Features & Benefits

- Largest selection of voltage and current ratings ever offered
- Connect two supplies in parallel to double the current output
- Connect two supplies in series to double the voltage output
- Reliable, Durable
- Operate continuously at full load without overheating
- Fully overload protected
- Coarse and fine voltage controls
- Excellent regulation
- Very low ripple
- Constant voltage or constant current operation
- Continuously monitor voltage and current output on two meters