

Models	1685B		1687B	1688B
Output				
Variable Output Voltage	1 – 60 V		1 – 36 V	1 – 18 V
Variable Output Current	0 – 5 A		0 – 10 A	0 – 20 A
Voltage Regulation				
Load (0-100% Load)			≤ 50 mV	
Line (90-132 VAC, 170-264 VAC Variation)			≤ 20 mV	
Current Regulation				
Load (10-90% Rated Voltage)			≤ 100 mA	
Line (90-132 VAC, 170-264 VAC Variation)			≤ 50 mA	
Ripple & Noise				
Ripple & Noise Voltage (rms)			≤ 5 mV	
Ripple & Noise Voltage (peak-peak)			≤ 50 mV	
Current Ripple & Noise (rms)			≤ 30 mA	
Meter Type & Accuracy				
Voltage Meter	3-Digit LED Display ± 0.2% + 3 counts			
Current Meter	3-Digit LED Display ± 0.2% + 3 counts			
Other				
Input Voltage	100-240 VAC 50/60 Hz			
Full Load Input Current	3.7 A (100 VAC) 1.7 A (230 VAC)	4.6 A (100 VAC) 2.1 A (230 VAC)	4.6 A (100 VAC) 2.1 A (230 VAC)	
Efficiency	82% (100 VAC) 86% (230 VAC)	82% (100 VAC) 86% (230 VAC)	81% (100 VAC) 85% (230 VAC)	
Switching Frequency	100 – 120 kHz			
Tracking Overvoltage Protections	O/P 1-5 V: set voltage +2 V O/P 5-20 V: set voltage +3 V O/P 20-60 V: set voltage +4 V	O/P 1-5 V: set voltage +2 V O/P 5-20 V: set voltage +3 V O/P 20-36 V: set voltage +4 V	O/P 1-5 V: set voltage +2 V O/P 5-18 V: set voltage +3 V	
Transient Response Time (50-100% Load)	1.5 ms			
Power Factor Correction	> 0.95 at optimal load			
Cooling Method	Thermostatically controlled fan from zero to full speed			
Protections	Overload, Overvoltage, Overtemperature			
Special Features	3 User-Defined Voltage and Current Presets, Analog Remote Control			
External Timed Programming	Max. 20 voltage and current steps Max. 99 min + 59 sec step time Max. 999 running cycles			
General				
Operating Temperature	32 °F to 104 °F (0 °C to 40 °C) ≤ 80% R.H.			
Storage Temperature	5 °F to 158 °F (-15 °C to 70 °C) ≤ 85% R.H.			
Dimensions (WxHxD)	7.9" x 3.5" x 8.2" (200 x 90 x 208 mm)			
Weight	5.2 lbs (2.4 kg)			
Two Year Warranty				
Supplied accessories	Power cord, instruction manual, application software CD, USB cable, remote control connector			

Note: All specifications apply to the unit after a temperature stabilization time of 15 minutes over an ambient temperature range of 23 °C ± 5 °C.