Data Sheet

3-14 V DC Power Supply
Model 1686A

Model 1686A is a high quality 3 to 14 V bench DC power supply primarily designed for powering automotive and marine electronic equipment. It has a maximum output current proportional to the voltage setting (see voltage and current output graph) and two panel mounted meters that continuously monitor the output voltage and current.

Designed for continuous duty without overheating, this 12 A DC power supply is an ideal car battery substitution allowing servicing or powering of mostly any car radio, car stereo, PA systems, low to medium power CB transceivers, or marine equipment. The 1686A uses thermostatically controlled fan cooling for improved heat dissipation while keeping bulk and weight to a minimum.

Model 1686A

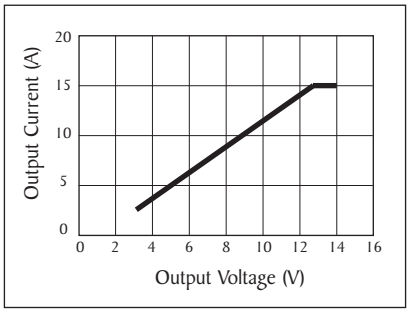
Specifications	1686A
Output	
Voltage	3 - 14 V
Current (Proportional to Output Voltage)	*12 A (at 13.8 V)
Load Regulation	≤ 0.8%
Line Regulation (108-132V AC)	≤ 0.8%
Ripple and Noise	≤ 10 mVrms
Metering	
Voltmeter Range	0-20 V
Voltmeter Accuracy	±7% F.S.
Ammeter Range	0-20 A
Ammeter Accuracy	±7% F.S.
General	
AC Input	115/230 VAC ±10%, 50/60 Hz
Power Consumption	400 W
Operating Temperature	32° to 104°F (0° to 40°C), ≤ 85% R.H.
Storage Temperature	5° to 158°F (-15° to 70°C), ≤ 75% R.H.
Dimensions (HxWxD)	4.9" x 8.5" x 11.5" (124 x 216 x 292 mm)
Weight	12.1 lbs (5.45 kg)
	One-Year Warranty
Included Accessories	Instruction Manual, Line Cord, Spare Fuse

* see graph for output current and output voltage

Features & Benefits

- 3 V to 14 V variable output
- 12 A output at 13.8 V*
- Thermostatically controlled cooling fan
- Continuous operation at full load without overheating
- Connect two or more units in parallel or series for higher current or voltage
- Convenient 2 A tie point terminals on front panel
- Overvoltage protection, foldback current limiting, and reverse polarity protection

Output Voltage and Current



Graph showing relationship between output voltage and output current

Technical data subject to change
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