

AC SOURCE POWER SUPPLIES

PWS1000

er Conversion Solutions Power Conversion Solutions

Adjustable Output Voltage

Switch-Mode Technology for Maximum Efficiency Over Temperature, Over Load, and Output Short Circuit Protection

Bright LED Operational Indicators

Ultra-Quiet Low EMI Operation

PWS1000 AC SOURCE POWER SUPPLY

The PWS1000 series of Power Supplies provides 1000 watts of continuous power at 12, 24, or 48 volts DC from a 110 or 220 volt AC source.

The newly updated single-board design is ultra-quiet and features the latest generation of current-mode PWM control. Modern switchmode technology coupled with powerful IGBT switching transistors allow for maximum efficiency and reliability while maintaining compactness. New circuit innovations reduce output ripple to levels previously only available from bulky and inefficient linear power supplies.

Designed for ease of use the PWS1000 has a four contact output terminal (two positive and two negative contacts) for easy connection of devices, covered output voltage adjust and a bright LED display panel for at-a-glance indication of the operational status.

Reliability features include an input fuse, thermal shutdown, and output short circuit shutdown with automatic recovery. While the devices powered by the unit are protected from excessive voltage and current by an output over voltage crowbar circuit and current limiting.



Available models



Applications





PWS1000 | AC SOURCE POWER SUPPLY

Nominal Voltage	110VAC	220VAC
Actual Voltage	90-130VAC	180-260VAC
Input Amps (Max)	13.2A(12V)	6.6A (12V)
	17A (24/32/48V)	8.5A (24/32/48V)
Input Fuse (MDA)	20A (12V)	10A(12V)
	25A (24/32/48V)	15A (24/32/48V)
Input Frequency	45 -65Hz	
Noise on Input	<50mV	

OUTPUT

Nominal Voltage	12VDC	24VDC	48VDC	72VDC
Actual Voltage	$13.6\pm0.05\text{VDC}$	$27.2\pm0.05\text{VDC}$	$54.4\pm0.1 \text{VDC}$	81.6 ± 1.5VDC
Output Current	60A Cont./ 70A Peak	40A Cont./ 45A Peak	20A Cont./ 22.5A Peak	13.3A Cont./ 15A Peak
Output Crowbar	$16.0\pm0.5V$	$32.0 \pm 1.0 V$	$63.9 \pm 2.0 V$	96 ± 3.0V
Output Adjustment		± 1.0 V		
Output Ripple & Noise	<50 mV			
Transient Response		<1V for 50	% Surge	
Regulation (Line & Load)		< +/- 0.5%		
Duty Cycle	Peak 20% for 10 minutes maximum Continuous 100% for 24 hours per day			
Efficiency	> 80% @ Maximum Output			

OPTIONS

GMDSS - Digital Voltmeter/Ammeter & Remote control kit.

Parallel Output Diodes for multiple unit connection

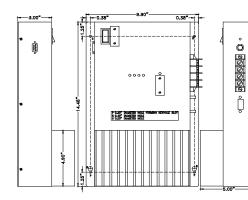
Safety Special Inspection (CSA/UL)

Integrated Digital Voltmeter/Ammeter

Heavy Duty Ruggedization with Wide OperationalTemperature range

Custom Input/Output Voltages available

DIMENSIONS



MECHANICAL

Dimensions	14.5 in (36.8 cm) Long x 9.9 in (25.1 cm) Wide x 5.5 in (14.0 cm) High
Clearance	1.0 in / 2.5 cm all around
Weight	12 lb / 5.5 kg
Material and Finish	Marine Grade Black Anodized Aluminum with 18-8 Stainless Fasteners
Mounting	Wall or shelf mount
Connections	Four contact output terminals

ENVIRONMENTAL AND SAFETY

Operating Temperature Range	-25°C to +40°C @ maximum output. Derate Linearly 2.5% per °C from 40°C (Optional -40°C to +55°C wide operational temperature range available)
Humidity	0 - 95% Relative Humidity (non-condensing) with standard conformal coating
Audible Noise	NONE 0db @ 3ft
Typical Service Life	> 10 years (87,600 hrs)
Isolation	Input-Case, Input-Output: 1500 VDC. Output-Case:500 VDC (1500V for 48 V Output)
Warranty	Three Years Parts and Labor
Safety	Certified to CSA C22.2 No.107.1 and UL 458



Note: Specifications are subject to change without notice.