

# ANALYTIC SYSTEMS

Power Conversion Solutions

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## AC Power Supplies

### PWS1000R Series Power Supply

#### Description

The PWS1000R Series of rackmount power supplies provides 12, 24 or 48 Volts DC at 1000 Watts of continuous power from a 110 or 220 Volt AC source.

Circuit innovations reduce output ripple to levels previously available only from bulky and inefficient linear power supplies. Reliability features include an input fuse, thermal shutdown, current limiting and output short circuit protection with automatic recovery. An Output Over voltage Crowbar circuit protects any powered devices from excessive voltage in the event of a failure of the unit.

Extra features include adjustable output voltage audible and visual indicators for low input voltage, low output voltage, over temperature, overload and output on. Either 110 or 220 VAC input (Field Convertible) is available. The PWS1000R also features a four contact output terminal (two positive and two negative contacts) for easy connection of devices to the supply.

All rackmount units come standard with high quality digital output meters to allow monitoring of output current and output voltage. An optional Battery Back-up is also available.

#### Features

#### Benefits

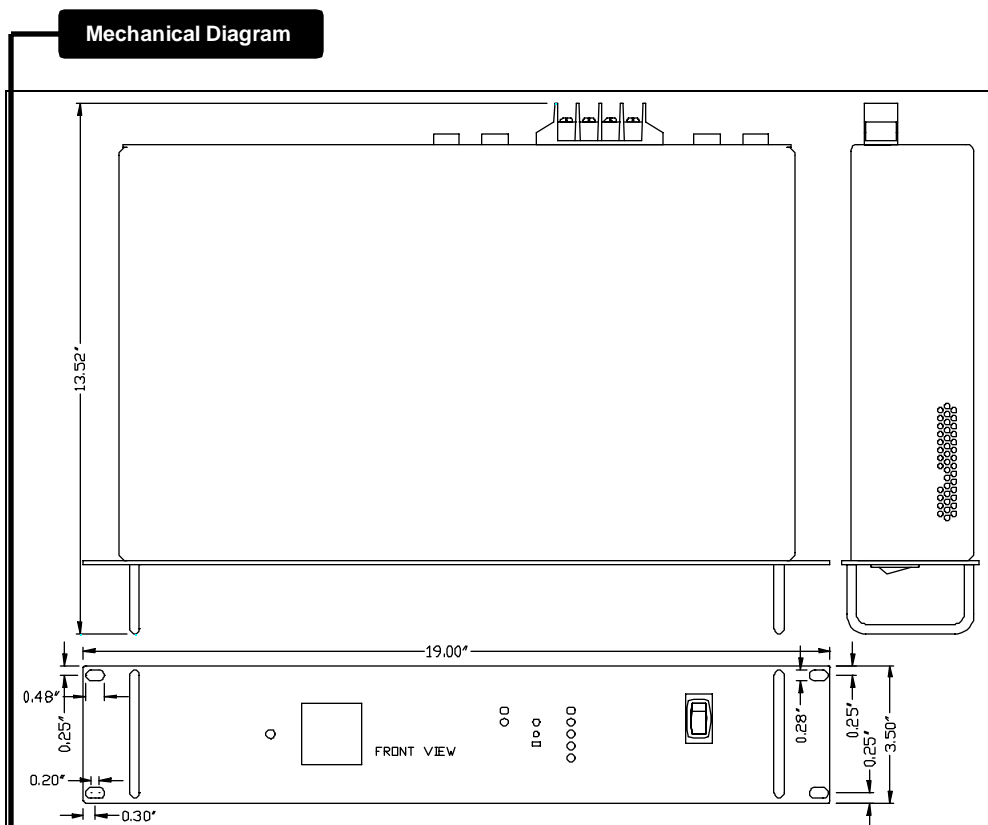
- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

#### Applications

- Telecom Power Plants
- Electric Utilities and Substations
- Marine & other rugged environments
- Base Station Power (Radio & Telecommunications)
- Industrial Controls (OEM Applications)
- Solar / Alternative Power Systems
- Emergency Power Backup (UPS)

- Adjustable output voltage
- Extremely rugged and well suited for marine and other demanding environments
- Ultra-quiet low EMI operation
- Audible & visual indicators for output overload, low input voltage, low output voltage & over-temperature
- Over-temperature shutdown
- Current limiting
- Short circuit protection
- Output overvoltage crowbar
- Dry contact output fail relay
- Thermostatically controlled cooling fan
- Standard Digital Volt/Ammeter
- Optional Parallel output diodes available
- Custom output voltages available (8V to 55V)
- 3 year parts and labour warranty
- Battery Charging (Rectifier) models available





## Specifications

### Electrical (Input)

<b>Nominal Vac (ip)</b>	110	220
<b>Actual (Vac)</b>	105-125	210-250
<b>Input Amps (max)</b>	14.6	7.3
<b>Input Fuse (MDA)</b>	12A	6A
<b>Input Frequency</b>	45-65 Hz	
<b>Noise on Input</b>	< 50 mV	

### Environmental Specifications

<b>Operating Temp. Range</b>	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide-temp. operation avail.)
<b>Humidity</b>	0 - 95°C Relative Humidity (non-condensing) with optional conformal coating
<b>Audible Noise</b>	NONE Ødb @ 3 ft
<b>Typical Service Life</b>	> 10 yrs. (87,600 hrs)
<b>Isolation</b>	Input-Case & Input-Output 1500VDC Output-Case 500VDC (1500VDC for 48V)

### Electrical (Output)

<b>Output Nominal (op)</b>	12	24	48
<b>Output Volts (DC)</b>	13.6 ± 0.05	27.2 ± 0.05	54.4 ± 0.1
<b>Output Amps</b>	60 cont. / 70 peak	40 cont. / 45 peak	20 cont. / 22.5 peak
<b>Output Crowbar</b>	16.0 ± 0.5V	32.0 ± 1.0V	63.9 ± 2.0V
<b>Output Adjustment (Vdc)</b>	± 0.5V		
<b>Output Ripple &amp; Noise</b>	< 50 mV		
<b>Transient Response</b>	< 1V for 50% Surge		
<b>Regulation (Line &amp; Load)</b>	< +/- 0.5%		
<b>Duty Cycle</b>	Peak 20% for 10 min maximum Continuous 100% for 24 hours per day		
<b>Efficiency</b>	> 80% @ Maximum Output		

### Mechanical Specifications

<b>Depth</b>	13.5 in
<b>Width</b>	19"
<b>Height</b>	2u (3.5 in.)
<b>Clearance</b>	1 inch (2.5 cm) all around
<b>Material</b>	Marine Grade Aluminium
<b>Finish</b>	Black Anodize / Powder Epoxy Coat
<b>Fastenings</b>	All 18-8 Stainless Steel
<b>Weight</b>	12.0 lb / 5.5 kg
<b>Connections</b>	Four contact output terminals
<b>Warranty</b>	3 years
<b>Safety</b>	cETLus to UL1012 & CSA22.2 Pending

Available From:



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Quality since 1976

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