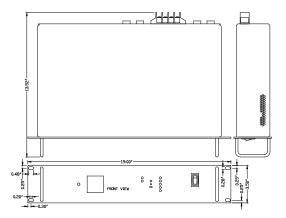


AC POWER SUPPLIES

MODEL PWS610R





Description

The PWS610R Series of rackmount power supplies provides 12, 24 or 48 Volts DC at 600 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 PWS610R 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.

Benefits

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

Design Features

- 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
- Convection cooled
- Dry contact output fail relay
- 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

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)

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AC POWER SUPPLIES



Name	Electrical (Input)			
### A	Nominal Vac (ip)	110	220	
Time Time MIDA	Actual (Vac)	90 – 130	180 - 260	
### Appendix** Append	nput Amps (max)	9.8	4.9	
Value on Input	nput Fuse (MDA)	15A	8A	
Detput Nominal (op)	nput Frequency	45-65 Hz		
Dutput Nominal (op) 12 24 48 Dutput Nominal (op) 18 6 ± 0.05 27.2 ± 0.05 54.4 ± 0.1 Dutput Amps 40 cont. / 45 peak 20 cont. / 25 peak 10 cont. / 125 peak Dutput Amps 40 cont. / 45 peak 20 cont. / 25 peak 10 cont. / 125 peak Dutput Adjustment (Vdc) ± 1.0V 32.0 ± 1.0V 63.9 ± 2.0V Dutput Rispile & Noise < 50 mW	Noise on Input	< 50 mV		
Dutput Volts (DC)	Electrical (Output)			
Dutput Amps	Output Nominal (op)	12	24	48
Dutput Crowbar 16.0 ± 0.5V 32.0 ± 1.0V 63.9 ± 2.0V 20.00	Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05	54.4 ± 0.1
Dutput Adjustment (Vdc) ± 1.0V Dutput Ripple & Noise < 50 mV	Output Amps	40 cont. / 45 peak	20 cont. / 25 peak	10 cont. / 12.5 peak
Dutyot Ripple & Noise < 50 mV	Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	63.9 ± 2.0V
Fransient Response Regulation (Line & Load) 2+/- 0.5% Peak 20% for 10 min maximum Continuous 100% for 24 hours per day Efficiency 8-80% @ Maximum Output EMC Built to meet FCC Part 15 Environment Specification Peate 1	Output Adjustment (Vdc)	± 1.0V		
Regulation (Line & Load)	Output Ripple & Noise	< 50 mV		
Duty Cycle Peak 20% for 10 min maximum Continuous 100% for 24 hours per day 80% @ Maximum Output 8MC Built to meet FCC Part 15 Environment Specification Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.)	Transient Response	< 1V for 50% Surge		
Continuous 100% for 24 hours per day Efficiency > 80% @ Maximum Output EMC Built to meet FCC Part 15 Environment Specification Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.) Fundibly 0-95% Relative Humidity (non-condensing) with optional conformal coating with optional conformal coating visualization of the properties of th	Regulation (Line & Load)	<+/- 0.5%		
Environment Specification 25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operating a valid). Humidity 0-95% Relative Humidity (non-condensing) with optional conformal coating Audible Noise NONE Ødb @ 3 ft Typical Service Life >10 yrs. (87,600 hrs) Input-Case & Input-Output 1500VDC Output-Case 500VDC (1500VDC @ 48V O/P) Wechanical Specification Depth 13.5 in/ 34.3 cm Width 19 in / 48.4 cm Height 2 u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Eastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Duty Cycle			
Environment Specification -25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.) -4umidity -4umidity -5 % Relative Humidity -6 (non-condensing) with optional conformal coating -6 Audible Noise -7 NONE Ødb @ 3 ft	Efficiency	> 80% @ Maximum Output		
Derating Temp. Range -25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.)	EMC	Built to meet FCC Part 15		
Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.) Humidity Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.) Audible Noise NONE Ødb @ 3 ft Reprical Service Life > 10 yrs. (87,600 hrs) solation Input-Case & Input-Output 1500VDC Output-Case 500VDC (1500VDC @ 48V 0/P) Mechanical Specification Depth 13.5 in/ 34.3 cm Width 19 in / 48.4 cm Height 2u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Marranty 3 years	Environment Specification			
Audible Noise NONE Ødb @ 3 ft Typical Service Life > 10 yrs. (87,600 hrs) Input-Case & Input-Output 1500VDC Output-Case 500VDC (1500VDC @ 48V 0/P) Mechanical Specification Depth 13.5 in/ 34.3 cm Width 19 in / 48.4 cm Height 2u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Operating Temp. Range	Derate Linearly 2.5% per °C from 40°C		
Fypical Service Life > 10 yrs. (87,600 hrs) solation Input-Case & Input-Output 1500VDC Output-Case 500VDC (1500VDC @ 48V O/P) Mechanical Specification Depth 13.5 in/ 34.3 cm Midth 19 in / 48.4 cm Leight 2u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Meight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Humidity			
Input-Case & Input-Output 1500VDC Output-Case 500VDC (1500VDC @ 48V 0/P) Mechanical Specification Depth 13.5 in/ 34.3 cm Width 19 in / 48.4 cm Height 2u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Audible Noise	NONE Ødb @ 3 ft		
Output-Case 500VDC (1500VDC @ 48V 0/P) Mechanical Specification Depth 13.5 in/ 34.3 cm Width 19 in / 48.4 cm Height 2u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Typical Service Life	> 10 yrs. (87,600 hrs)		
Depth Width 19 in / 48.4 cm Height 2u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Isolation			
Width 19 in / 48.4 cm Height 2u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Mechanical Specification			
Height 2u (3.5 in.) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Depth	13.5 in/ 34.3 cm		
Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Width	19 in / 48.4 cm		
Material Marine Grade Aluminium Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Height	2u (3.5 in.)		
Finish Black Anodize / Powder Epoxy Coat Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Clearance	1 inch (2.5 cm) all around		
Fastenings All 18-8 Stainless Steel Weight 12 lb / 5.5 kg Connections Four contact output terminals Warranty 3 years	Material	Marine Grade Aluminium		
Neight 12 lb / 5.5 kg Connections Four contact output terminals Narranty 3 years	Finish	Black Anodize / Powder Epoxy Coat		
Connections Four contact output terminals Warranty 3 years	astenings	All 18-8 Stainless Steel		
Connections Four contact output terminals Warranty 3 years	Weight	12 lb / 5.5 kg		
	Connections	Four contact output terminals		
	Warranty	3 years		
	Safety	Designed to meet CSA	A 22.2.107.1 & UL458	

Note: Specifications are subject to change without notice.



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