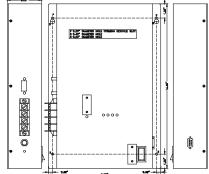


# AC POWER SUPPLIES

## MODEL PWS610 SERIES





## **Description**

The PWS610 Series of power supplies provides 12, 24 or 48 Volts DC at 600 Watts of continuous power from a 110 or 220 Volt AC source.

Analytic Systems' power supplies use Switchmode technology with powerful IGBT switching transistors for reliability and efficiency with minimum size. 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.

The newly updated single-board PWS610 is ultra-quiet and features the latest generation of current mode PWM control. 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 PWS610 also features a four contact output terminal (two positive and two negative contacts) for easy connection of devices to the supply.

#### **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
- Dry contact output fail relay
- Remote control option
- Digital Volt/Ammeter option
- Custom output voltages available
- 19" Rackmount Available
- 3 year parts and labour warranty
- Parallel output diodes available

### **Applications**

- Marine & other rugged environments
- Mobile Offices (TV and Radio Vans)
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- Industrial Controls (OEM Applications)
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Power Backup (UPS)
- Security Systems
- Product Burn-in Facilities

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## AC MODEL PWS610 SERIES

Electrical (Input)					
Nominal Vac (ip)	110	220			
Actual (Vac)	90 – 130	180	- 260		
Input Amps (max)	9.8	4.9			
Input Fuse (MDA)	15A	8A			
Input Frequency	45-65 Hz				
Noise on Input	< 50 mV				
Electrical (Output)					
Output Nominal (op)	12	24	48	72	
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05	54.4 ± 0.1	81.6 ± 0.15	
Output Amps	40 cont. / 45 peak	20 cont. / 25 peak	10 cont. / 12.5 peak	6.7 cont. / 8.3 peak	
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	63.9 ± 2.0V	96 ± 3.0V	
Output Adjustment	± 1.0V				
Output Ripple & Noise	< 50 mV				
Transient Response	< 1V for 50% Surge	< 1V for 50% Surge			
Regulation (Line & Load)	< +/- 0.5%	<+/- 0.5%			
Duty Cycle		Peak 20% for 10 min max Continuous 100% for 24 hours per day			
Efficiency	> 80% @ Maximum	> 80% @ Maximum Output			
EMC	Built to meet FCC Pa	Built to meet FCC Part 15			
Environment Specification					
Operating Temp. Range	Derate Linearly 2.5%	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.)			
		0 - 95% Relative Humidity (non-condensing) with optional conformal coating			
Humidity			coating		
Humidity  Audible Noise			coating		
,	(non-condensing) wi	th optional conformal	coating		
Audible Noise	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-	th optional conformal			
Audible Noise Typical Service Life	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-	ith optional conformal s) Output 1500VDC			
Audible Noise Typical Service Life Isolation Mechanical Specification	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-	ith optional conformal s) Output 1500VDC			
Audible Noise Typical Service Life Isolation Mechanical Specification Length	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-Case 500VDi	ith optional conformal s) Output 1500VDC			
Audible Noise Typical Service Life Isolation Mechanical Specification Length Width	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input- Output-Case 500VDi	ith optional conformal s) Output 1500VDC			
Audible Noise Typical Service Life Isolation Mechanical Specification Length Width	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input- Output-Case 500VDi 13.5 in / 34.3 cm 19 in / 48.4 cm	ith optional conformal s) Output 1500VDC C (1500VDC @ 48V O/			
Audible Noise Typical Service Life Isolation  Mechanical Specification  Length Width Height Clearance	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-Output-Case 500VDi 13.5 in / 34.3 cm 19 in / 48.4 cm 3.5 in / 1.38 cm	ith optional conformal  S)  Dutput 1500VDC C (1500VDC @ 48V 0/l			
Audible Noise Typical Service Life Isolation  Mechanical Specification  Length Width  Height Clearance Material	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-Output-Case 500VDi 13.5 in / 34.3 cm 19 in / 48.4 cm 3.5 in / 1.38 cm 1 inch (2.5 cm) all ar	ith optional conformal  ith optional conformal  ith optional conformal  ith optional conformal			
Audible Noise Typical Service Life Isolation  Mechanical Specification  Length Width  Height Clearance  Material Finish	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-Case & Input-Case 500VD) 13.5 in / 34.3 cm 19 in / 48.4 cm 3.5 in / 1.38 cm 1 inch (2.5 cm) all ar Marine Grade Alumi	ith optional conformal  Dutput 1500VDC C (1500VDC @ 48V 0/I			
Audible Noise Typical Service Life Isolation  Mechanical Specification  Length Width Height Clearance Material Finish Fastenings	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-Output-Case 500VDi 13.5 in / 34.3 cm 19 in / 48.4 cm 3.5 in / 1.38 cm 1 inch (2.5 cm) all ar Marine Grade Alumi Black Anodize / Pow	ith optional conformal  Dutput 1500VDC C (1500VDC @ 48V 0/I			
Audible Noise Typical Service Life Isolation  Mechanical Specification  Length Width  Height Clearance  Material Finish	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-Output-Case 500VDi  13.5 in / 34.3 cm 19 in / 48.4 cm 3.5 in / 1.38 cm 1 inch (2.5 cm) all ar Marine Grade Alumi Black Anodize / Pow	ith optional conformal  Dutput 1500VDC C (1500VDC @ 48V O/I			
Audible Noise Typical Service Life Isolation  Mechanical Specification  Length Width Height Clearance Material Finish Fastenings Weight	(non-condensing) wi NONE Ødb @ 3 ft > 10 yrs. (87,600 hrs Input-Case & Input-Coutput-Case 500VDi 13.5 in / 34.3 cm 19 in / 48.4 cm 3.5 in / 1.38 cm 1 inch (2.5 cm) all ar Marine Grade Alumi Black Anodize / Pow All 18-8 Stainless Stanless Stanles	ith optional conformal  Dutput 1500VDC C (1500VDC @ 48V O/I			

Note: Specifications are subject to change without notice.



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