

# 160 Watt, PSC-160 Series, Battery Back Up Power Supply



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- Universal AC Input
- 6"X 3" Compact Open Frame Size
- Battery Low Protection / Battery Reverse polarity protection by fuse
- Short Circuit, Over Voltage, Over Load Protected
- Convection Cooled To Full Power
- Alarm Relay Signal AC OK & Battery Low
- Full Approvals: UL/EN/CE
- Optional Covers & Connector Kits



## Specification

Input Voltage.....	90~264 VAC, 47~63 Hz (127-370 VDC)
Inrush Current.....	35 A @ 115 VAC, 70 A @ 230 VAC
Output Voltage.....	See table below, Main O/P to Load + Float Charger O/P
Output Voltage Adjustment.....	O/P 1 (12-15 Volts) or (24-29 Volts) O/P 2 Tracks O/P 1
Load Regulation.....	+/-0.5%
Line Regulation.....	+/-0.5%
Over Voltage Protection.....	PSC-160A O/P 1 : 14.49~18.63V, PSC-160B O/P 1 : 28.98~37.26V
Overload Protection.....	105~150% hiccup mode, auto recovery.
Battery Cut Off.....	PSC-160A 10 Volts (+/-0.5V), PSC-160B 20 Volts (+/-1V)
AC OK Alarm.....	Relay contact output, ON = AC OK, OFF = AC Fail
Battery Low Alarm.....	Relay contact output, ON = Battery Low (<11v / <22V) OFF = Battery OK
Hold Up Time.....	40 ms, min @ full load 230 VAC
Input to Output Isolation.....	I/P-O/P: 3 kVAC,
Operating Temperature .....	-20 to +70 °C, see derating curve
Storage Temperature.....	-25 to +85 °C
Safety Standards.....	UL60950-1 TUV EN60950-1, CE
EMC.....	EN55022 (CISPR22) class B, EN55024, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, light industrial level criteria A
MTBF.....	257K Hours, MIL-HDKB-217F @ 25°C
Mechanical .....	152.4 x 76.2 x 32 mm (standard open frame unit)
Connections Input & Output.....	JST Plug In Connections (connector kits available from ALL PSU)

## Models and Ratings (Output 1 to Load, Output 2 Battery Float Charger).

Model	Output 1	Output 2	Battery Voltage
<b>PSC-160A</b>	13.8 Volts / 11.6 Amps	13.8 Volts / 4 Amps	12 Volts
<b>PSC-160B</b>	27.6 Volts / 5.8 Amps	27.6 Volts / 2 Amps	24 Volts

### Notes :

- 1) The above units can supply a maximum of 160 Watts total power, therefore if battery charge current drawn is lower than maximum then more power can be taken from output 1 to the load, up to 100% of total rating.
- 2) Units include auto switchover circuit to power load from battery in the event of AC mains failure.
- 3) Units include alarm signals for AC OK and Battery Low

Please see next page for mechanical drawings.

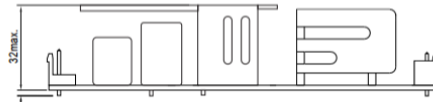
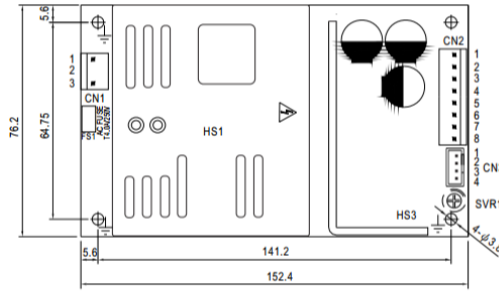
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Email : sales@allpsu.co.uk, Web : www.allpsu.co.uk**

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## Mechanical Drawings & Connections.



- 1.HS1.HS3 can not be shorted.
- 2.HS1.HS3 must have safety isolation distance with system case.
- ⚡.Grounding required

### AC Input Connector (CN1) : JST B3P-VH or Equivalent

PIN No	Assignment	Mating Housing	Terminal
1	AC Neutral	JST VHR or Equivalent	JST SVH-21T-P1.1 or Equivalent
2	No Pin		
3	AC Live		

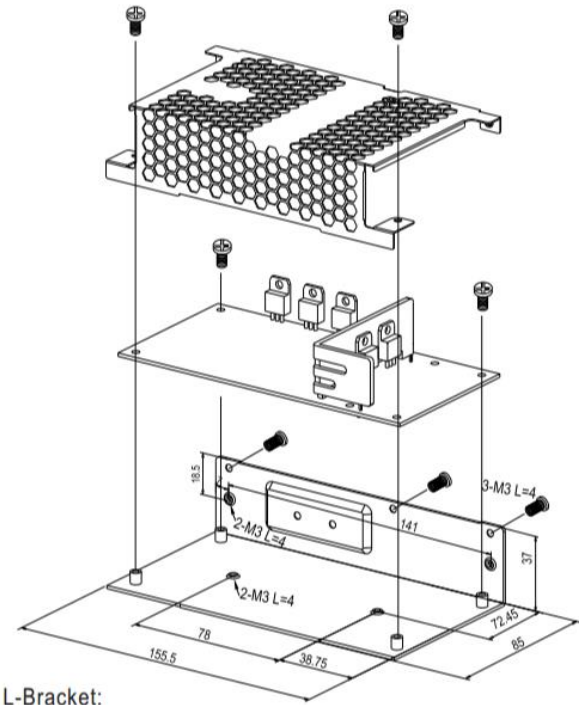
### DC Output Connector (CN2) : JST B8P-VH or Equivalent

PIN No	Assignment	PIN No	Assignment	Mating Housing	Terminal
1,2	-V out	5,6	Battery +	JST VHR or Equivalent	JST SVH-21T-P1.1 or Equivalent
3,4	+V out	7,8	Battery -		

### Alarm Output Connector (CN3) : JST B4B-XH or Equivalent

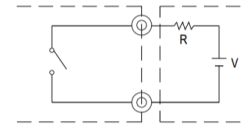
Pin No	Assignment	Mating Housing	Terminal	Description
1 2	AC OK	JST VHR or Equivalent	JST SVH-21T-P1.1 or Equivalent	The signal is Low when AC present and turns High when AC Fails
3 4	Battery Low			The signal is Low when Battery Voltage is under 11 Volts / 22 Volts and turns High when Battery Voltage above these levels.

Cover:  
No.231A-T



L-Bracket:  
No.231A-D

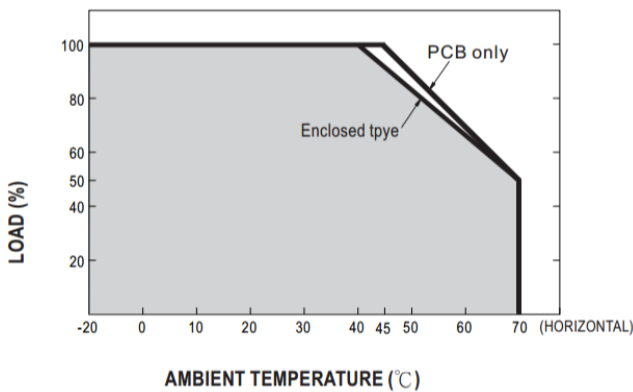
AC OK (Battery low)  
CN3 Pin1 (Pin3)



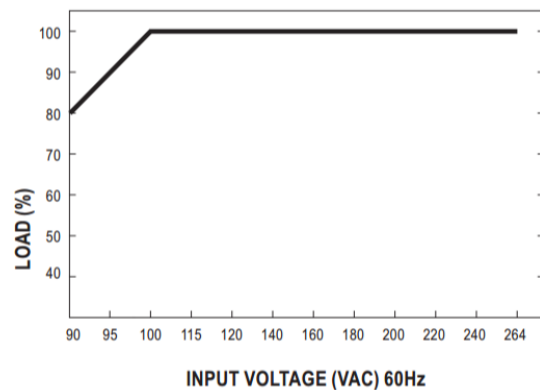
CN3 Pin2(Pin4)

External voltage source (V) and resistor (R)  
(The max. Sink is 1A and 30V)

### Output Derating



### Output Derating VS Input Voltage



Specifications may change without notice. E&OE. ALL PSU Terms & Conditions apply.

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