

# PB256 Series:

138 Watts - Battery Charger / DC UPS



# **FEATURES**

- 138W 12VDC & 24VDC
- Battery Backup System
- DC UPS Connectable
- Independent Load and Battery Current Limited
- · Converter ON/OK alarm
- Battery Low Alarm

- Battery Low Voltage Disconnect
- Battery Over Load protection
- Conformal Coating option for wet areas
- · C-Tick Approved
- Installation handbook available on request

# **SPECIFICATIONS**

MODEL		PB256-1210CML	PB256-2405CML		
	Voltage [V]	AC190 - 265 1ø or DC190 - 400	AC190 - 265 1ø or DC190 – 400		
INPUT	Current [A]	1.4 max.	1.4 max.		
	Frequency [Hz]	50/60 (45 - 65)			
	Efficiency [%]	80 min.			
	Inrush current [A]	15 max. (cold start)			
OUTPUT (AC Mains Operation)	Voltage [VDC]	13.8	27.6		
	Total Output Current [A]*2	8.0 / 10.0*3	4.0 / 5.0*3		
	Total Output Current Limit [A]*2	11.2 typ.	5.9 typ.		
	Battery Charging Current Limit [A]*4	2.0 typ.	1.0 typ.		
	Line Regulation [%]	0.2 typ.			
	Load Regulation [%]	0.2 typ.			
	Ripple [mVp-p]*3	25 max.	45 max.		
	Noise [mVp-p]*3	20 max.	40 max.		
	Overvoltage Shutdown	15.5 - 19.5 (Latching)	31.5 - 39.0 (Latching)		
	Output Short Circuit Protection	Indefinite (Autoresetting)			
	Battery Charger Short Circuit protection	Indefinite (Autoresetting)			
	Overtemperature Limit [°C]*6	110 typ. (Autoresetting)			
OUTPUT (Battery Operation)	Voltage Drop Battery to Output [V]	0.4 typ.	0.2 typ.		
	Low Voltage Disconnect [V]	10.8 typ.	21.6 typ.		
	Output Overload Protection	Battery Electronic Circuit Breaker			
	Battery Reverse Polarity Protection	Internal Fuse			

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138 Watts - Battery Charger



MODEL		PB256-1210CML	PB256-2405CML	
	DC OK	LED (Green) ON=OK, Voltage-free Changeover Contact (32V,1A) Alarm on loss of mains, failure of AC/DC Converter and tripping of overtemperature limit		
DISPLAYS AND ALARMS	BATTERY OK	LED (Green) ON=OK, Voltage-free Changeover Contact (32V,1A) Alarm on battery low voltage or on failure of battery fuse.		
	Alarm Voltage (Falling) [V]	11.3	22.6	
ISOLATION	Input - Output	4242 VDC, 1 minute		
	Input - Ground	2121 VDC, 1 minute		
	Output - Ground	707 VDC, 1 minute		
SAFETY AND EMC	Safety	AS/NZS 60950, Class I CAUTION NEUTRAL FUSING		
	EMC	Complies with ACA EMC Scheme - C-Tick Emissions Comply with AS/NZS CISPR11 Group1, Class B		
ENVIRONMENT AND OTHERS	Operating Temp And Humidity	0 to 60°C, 5 to 90%RH (Non condensing) (Refer to DERATING CURVE)		
	Case Size / Weight	230 x 93 x 46mm (LxWxH) / 850g		
	Cooling Method	Natural Convection		

 $<sup>^{\</sup>star 1} \text{ WARNING: Do not apply voltages higher than the output voltage to the unit output or serious damage to the unit can occur!}$ 

# **SELECTION TABLE**

MODEL	OUTPUT VOLTAGE	TOTAL CURRENT	BATTERY CURRENT	OUTPUT POWER
PB256-1210CML	13.8Vdc	10A	2A	138W
PB256-2405CML	27.6Vdc	5A	1A	138W

<sup>\*2</sup> Note: Sum of load + battery charging current; example 2A charging + 8A load = 10A

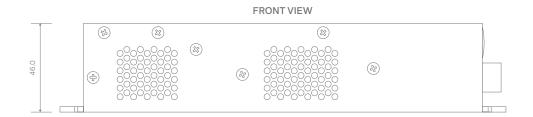
 $<sup>^{*3}</sup>$  To operate at maximum output current, these models must be attached to a heatsink (300 x 300 x 2mm Aluminum plate or equivalent heatsink).

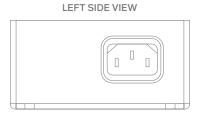
<sup>\*4</sup> This feature limits battery charging current but not load current.

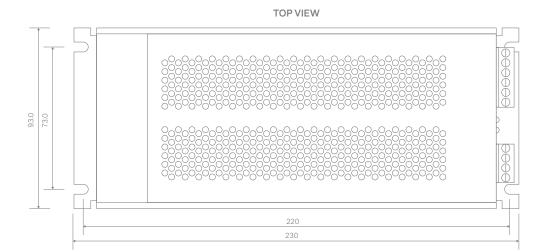
 $<sup>^{\</sup>ast 5}\,$  Using a 20MHz oscilloscope at the output terminals.



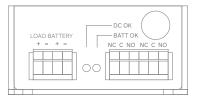
### **TECHNICAL DRAWINGS**







# RIGHT SIDE VIEW

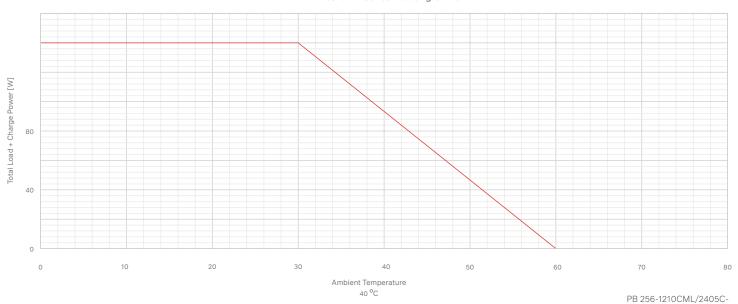


# NOTES:

- 1. Mounting Centres:

  - 220 x 73mm Suitable for M4 Hardware
- 2. AC Mains:
- 10A Class 1 IEC60320 power inlet
- 3. Output and Battery: 4W Pluggable Screw Terminal
  - Suitable for up to 1.5 sq. mm wire
- 4. Alarms:
  - 6W Pluggable Screw Terminal Block
  - Suitable for up to 1.5 sq. mm wire

### PB256-CML Series Derating Curve



ML Attached to 300x300x2mm

**Powerbox Pacific**