

PB251A-CM Series: Battery Charger System



FEATURES

- 220 - 330W Battery Charger System
- DC UPS Connectable
- Constant Float Voltage & Current Limit
- Independent Battery Charging Output
- DC OK & Battery OK Alarms with Relays
- Battery Connected Test
- LVD - Battery Low Volts Disconnect
- Optional Battery Charge Current Limit
- Optional Network Connected
- Optional Battery Temperature Probe
- Operations installation handbook available

SPECIFICATIONS

MODEL		PB251A-12CM	PB251A-12CM-H	PB251A-24CM	PB251A-24CM-H
INPUT	Voltage [V]	AC190 - 265 1ø or DC225 - 400			
	Current [A]	3.0 max.			
	Frequency [Hz]	50/60 (45 - 65)			
	Efficiency [%]	85 min.		88 min.	
	Inrush current [A]	10 max. (cold start)			
OUTPUT (AC Mains Operation)	Voltage [VDC]	13.8		27.6	
	Adjustment Range	12.0 - 16.0V		24.0 - 31.0V	
	Current [A]*1	16.0	20.0	11.0	12.0
	Current Limit [A]*1	20.5	20.5	12.5	12.5
	Adjustment Range	10 - 20.5A		5.0 - 12.5	
OUTPUT (Battery Operation)	Battery charging Current limit [A]*2	2.0	4.0	2.0	2.0
	Adjustment Range	2.0 - 20.5A		1.0 - 12.5	
	Line Regulation [%]	0.2 typ.			
	Load Regulation [%]	0.5 typ.			
	Ripple [mVp-p]*3	28 max.		55 max.	
	Noise [mVp-p]*3	28 max.		55 max.	
	Overvoltage Shutdown	17.5 - 20.0 (Latching)		31.5 - 39.0 (Latching)	
	Output Short Circuit Protection	Indefinite (Autoresetting)			
	Battery Charger Short Circuit protection	Indefinite (Autoresetting)			
	Overtemperature Shutdown [°C]	100 typ. (Autoresetting)			
OUTPUT (Battery Operation)	Voltage Drop Battery to Output [V]	0.2 typ.			
	Low Voltage Disconnect [V]	10.5 typ.		21.0 typ.	
	Adjustment Range	9.6 - 12.0		19.2 - 24.0	
	Output Overload Protection	Battery Electronic Circuit Breaker			
Battery Reverse Polarity Protection	Internal Fuse				

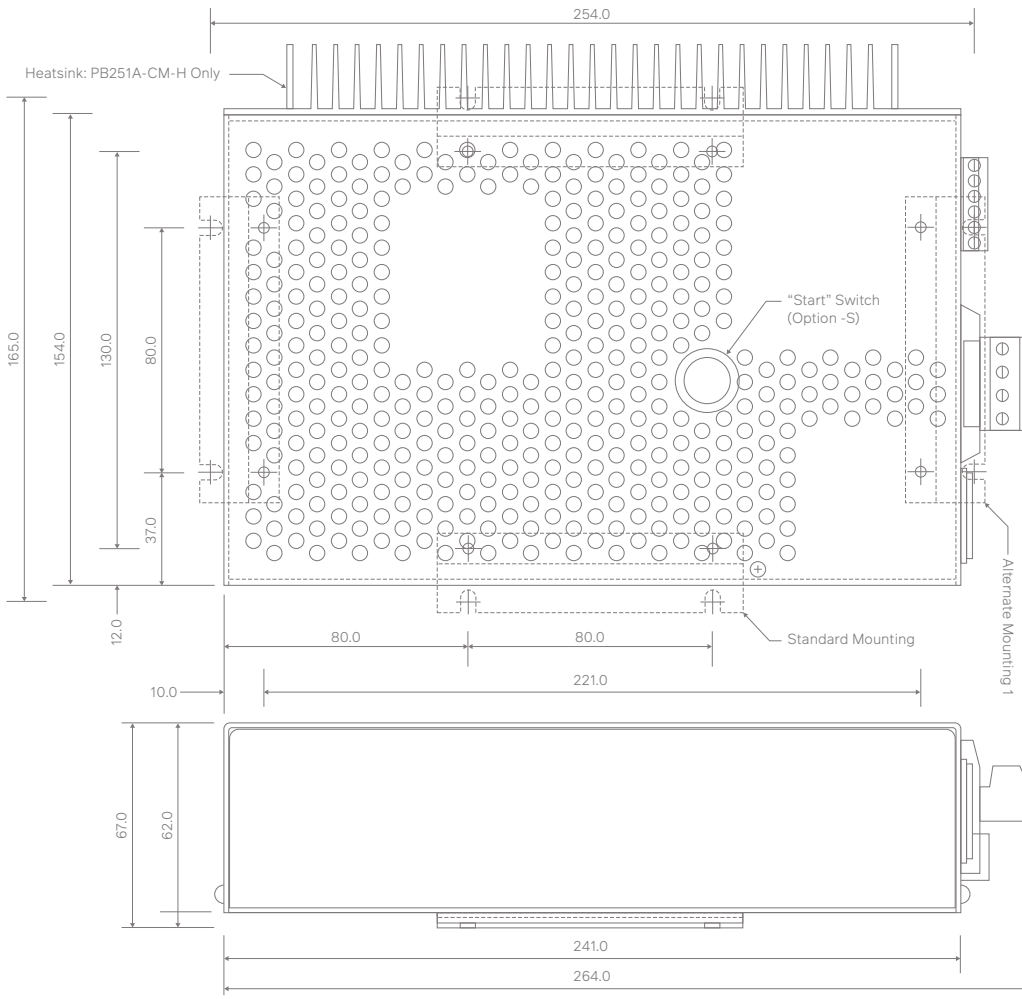
MODEL		PB251A-12CM	PB251A-12CM-H	PB251A-24CM	PB251A-24CM-H
DISPLAYS AND ALARMS	DC / CHARGER OK	LED (Green) ON=OK, Voltage-free Changeover Contact (32V,1A) Alarm on loss of mains or failure of AC/DC converter and battery charger.			
	BATTERY OK	LED (Green) ON=OK, Voltage-free Changeover Contact (32V,1A) Alarm on battery low voltage, if no battery is connected or on failure of battery fuse or wiring.			
	Alarm Voltage (Falling) [V]	10.8		21.6	
	LCD DISPLAY	N/A			
	METERS	N/A			
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			
	EMC	Complies with ACA EMC Scheme - C-Tick RF Emissions Comply with AS/NZS CISPR11 Group1, Class B Harmonic Current Emissions Comply with AS/NZS 61000.3.2, Class A			
ENVIRONMENT AND OTHERS	OPERATING TEMP AND HUMIDITY	0 to 70°C, 5 to 90%RH (Non condensing) (Refer to DERATING CURVES)			
	CASE SIZE / WEIGHT	-CM Models: 264 x 172 x 67mm (LxWxH) / 1.9 kg -CM-H Models: 264 x 186 x 67mm (LxWxH) / 2.1 kg			
	COOLING METHOD	Natural Convection			

Notes: *1 Sum of load + batt. charging current. *2 This feature limits batt. charging current but not load current. *3 Using a 100MHz oscilloscope at the output terminals.

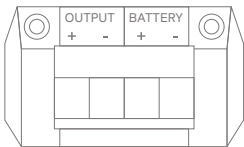
SELECTION TABLE

MODEL	OUTPUT VOLTAGE	TOTAL CURRENT	BATTERY CURRENT	OUTPUT POWER
PB251A-12CM	13.8V	16A	2A	220W
PB251A-12CM-H	13.8V	20A	4A	275W
PB251A-24CM	27.6V	11A	2A	300W
PB251A-24CM-H	27.6V	12A	2A	330W

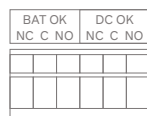
TECHNICAL DRAWINGS



OUTPUT / BATTERY TERMINATIONS



ALARM TERMINATIONS



NOTES:

- Mounting Centres: Suitable for M4 Hardware
 - Standard: 165 x 80 mm
 - Alternate 1: 254 x 80 mm
 - Alternate 2: 77 x 80 mm
- M3 threaded holes on bottom of base.
 - Standard: 130 x 80 mm centres
 - Alternate 1: 221 x 80 mm centres
 - Alternate 2: 42.5 x 80 mm centres
- AC Mains: 10A Class 1 IEC60320 power inlet
- Output and Battery: 4W Pluggable Screw Terminal Block
 - Suitable for up to 4 sq. mm wire.
- Alarms: 6W Pluggable Screw Terminal Block
 - Suitable for up to 1.5 sq. mm wire.

