

PB251A-RM Series

BATTERY CHARGER SYSTEM

FEATURES

- 220 - 330W Battery Charger System
- DC UPS Connectable
- Digital Display System
- Rack Mounting
- Constant Float Voltage & Current Limit
- Independent Battery Charging Output
- DC OK & Battery OK Alarms with Relays
- Battery Connected Test Battery Low Volts Disconnect
- Optional Battery Charge Current Limit
- Optional Network Connected
- Optional Battery Temperature Probe
- OPERATIONS INSTALLATION HANDBOOK AVAILABLE



SPECIFICATIONS

INPUT	
Input Voltage:	190 to 264Vac, or 225 to 400Vdc
Frequency	45 to 65 Hz
Input Current:	1.4A maximum
Inrush current:	10A maximum
Line regulation:	0.2% typical
OUTPUT	
Output Voltage	13.8Vdc, 27.6Vdc
Output Power	275W - 330W
Output Current	13.8Vdc: 20A 27.6Vdc: 12A
Load regulation	0.5% typical
Ripple & noise	100 MHz bandwidth 28mVp-p (13.8Vdc output) 55mVp-p (27.6Vdc output)
Efficiency	> 80%
PROTECTION	
Current limit	Load circuit - Constant current Battery circuit - Constant current
Short circuit protection	Indefinite, auto-resetting
Over-voltage protection	17.5 to 20V latching (13.8Vdc output) 31.5 to 39V latching (27.6Vdc output)
Isolation	Input to Output: 4.2Kvdc 1 min Output to Ground: 2.1Kvdc 1 min Output to Ground: 700Vdc 1 min
ENVIRONMENT	
Operating temperature	0 to 70°C ambient Derating from 40°C at 2.5%/°C
Humidity	5 to 90% relative humidity (non-condensing)
Over-temperature protection	Automatic & auto-resetting
Cooling requirement	Natural convection
STANDARDS	
C-Tick	AS/NZS CISPR11 Group 1 Class A.
Safety	Complies with AS/NZS 60950, class 1, NSW Office of Fair Trading Approval N20602
EMC	Emissions comply with AS/NZS CISPR11, Group 1, Class B. Complies with ACA EMC Scheme, Safety & EMC Regulatory Compliance Marked

ALARMS & BATTERY	
DC Ok alarm	Green LED : ON=OK voltage free change over relay contacts (32V,1A) Alarms on loss of AC mains power or failure of off-line AC/DC converter / battery charger
Charger voltage OK alarm	Green LED : ON=OK voltage free change over relay contacts (32V,1A) Alarms on battery low voltage, failure of battery fuse or battery disconnected. Alarm cancelled when fuse or battery replaced, or AC input restored
Battery low voltage disconnect(LVD)	Low voltage disconnect 10.5V for 12V battery, 21V for 24V battery, adjustable 1.6 to 2.0V / cell all models
Charger over-load protection	Auto-resetting electronic circuit breaker
Reverse polarity protection	Internal battery fuse
Battery to load voltage drop	0.2 to 0.35V typical model dependant
OPTIONAL FEATURES	
Battery Charging Limit	Option BCL: Factory set to maximum of the total rated output current. The BCL charging current based on A/H battery size and make of battery.
Network enabled	Option N: Internal network card in conjunction with PB251A becomes a network enabled device combining the benefits of SNMP V1, XML and embedded webpage.
Analogue meters	Option M: Load voltage, load current, battery charge and discharge.
Temperature compensation	Option T: 2.5m cable probe Option T5: 5m cable probe Float voltage set to 2.3V/cell at 25°C with compensation of 3.3mv/°C cell
Battery Capacity Test	Contact Powerbox for further information
MECHANICAL	
Input connector	IEC60320 inlet, 10A Class 1 2 meter IEC mains cord with Australian plug is supplied with each unit
Output and battery connector	PB251A-RML: M4 screw terminals PB251A-B: Hirose HS28R-4A. Mating connector is Hirose HS28P-4A (not supplied)
Alarm terminal	PB251A-RML: M3.5 screw terminals PB251A-B: DB25 female
Enclosure	19" Rack Mount, 2RU height, 232mm Mounting slots suitable for M6 hardware
Weight	5.5kg

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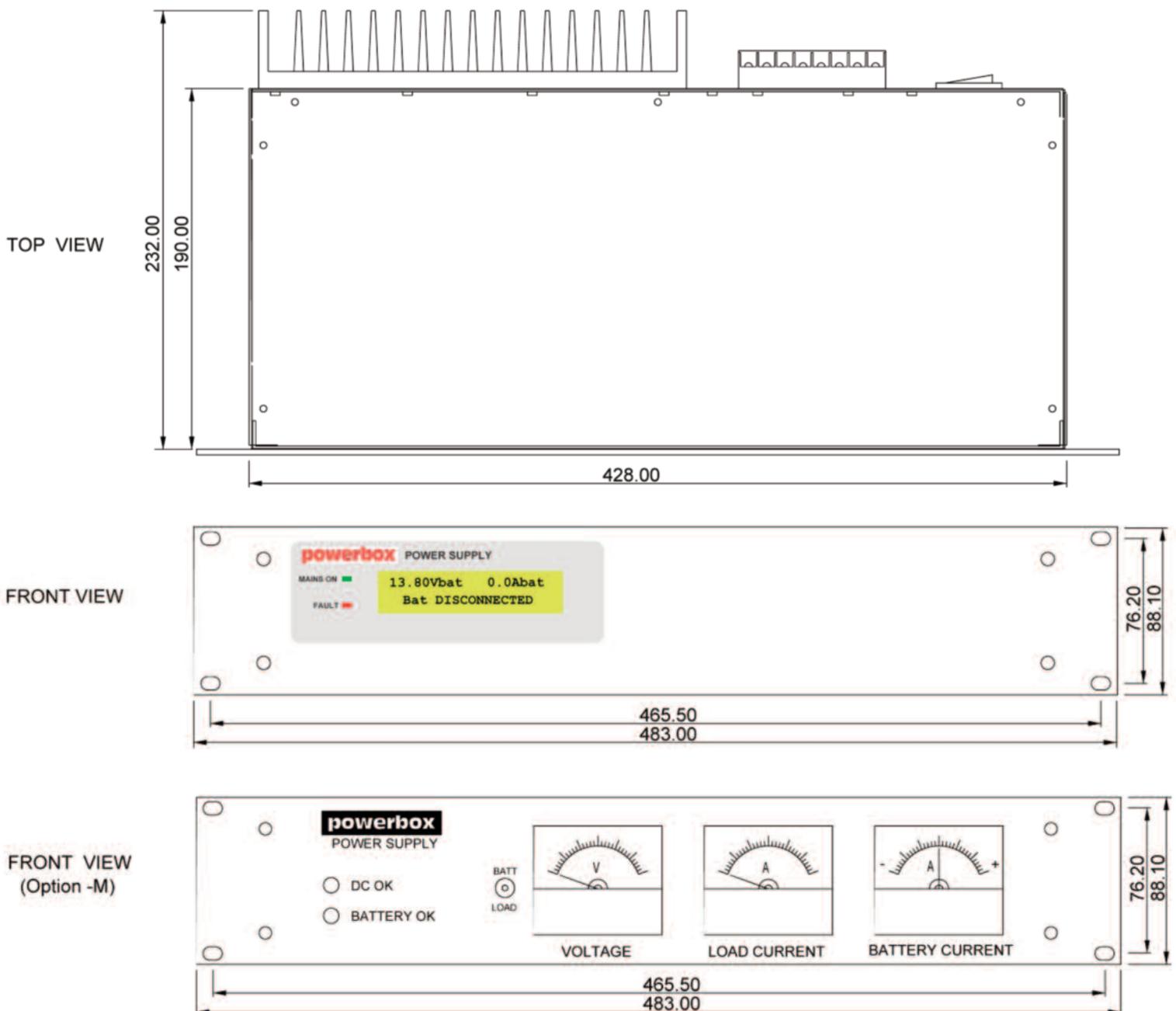
SELECTION TABLE

MODEL NUMBER	OUTPUT VOLTAGE	TOTAL CURRENT	BATTERY CURRENT	OUTPUT POWER	MECHANICAL
PB251A-12RML	13.8V	20A	4A	275W	Rack Mount / Screw terminals
PB251A-24RML	27.6V	12A	2A	330W	Rack Mount / Screw terminals
PB251A-12B	13.8V	20A	20A	275W	Rack Mount / Hirose connector
PB251A-24B	27.6V	12A	12A	330W	Rack Mount / Hirose connector

NOTES

- 1). Total output current is sum of load and battery charging current.
- 2). Other BCL option, Battery Charging Limits, available on request, factory set.
- 3). Example models number, PB251A-12RML-M-10, Includes analogue meters and 10A battery charge current.
- 4). PB251A-B versions, in standard unit the battery current limit set to maximum.

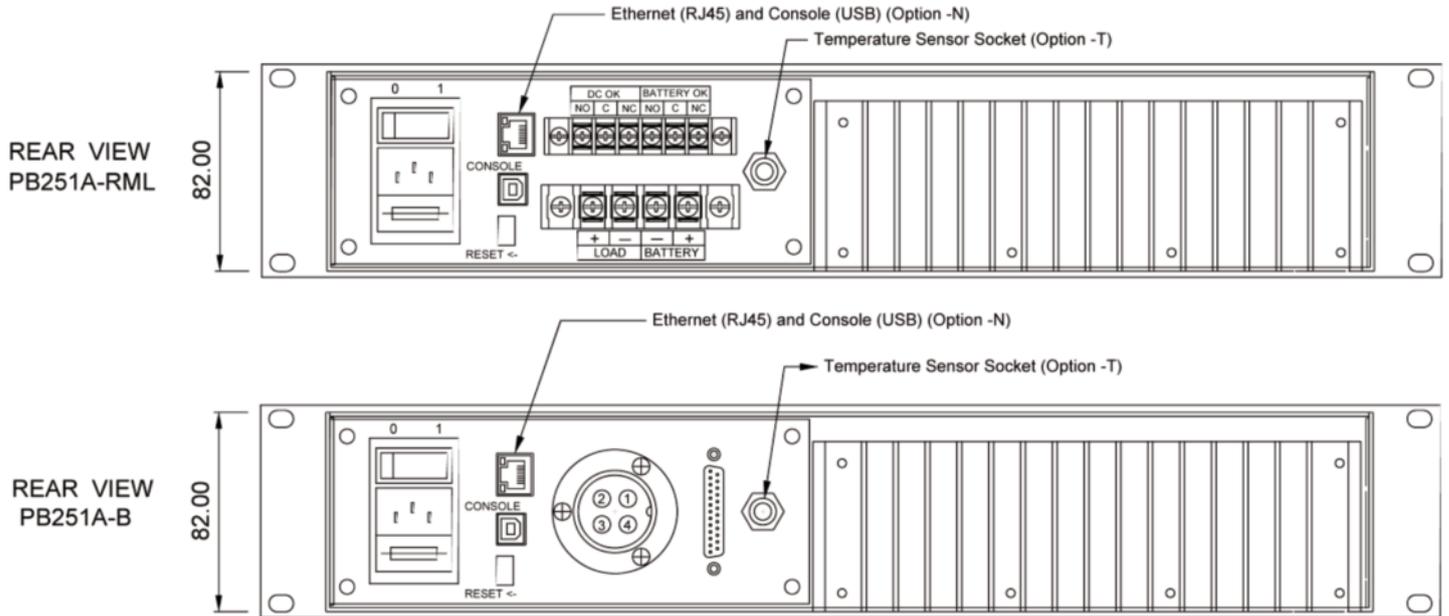
TECHNICAL ILLUSTRATIONS



PB251A-RM Series

BATTERY CHARGER SYSTEM

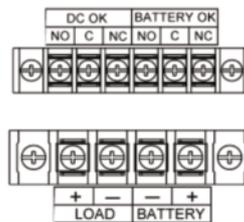
TECHNICAL ILLUSTRATIONS



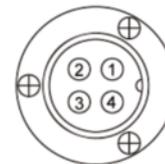
NOTES:

1. 2RU x 19" rack enclosure per IEC297
2. Mounting slots are suitable for M6 hardware.
3. Input connector is a 10A Class 1 IEC60320 inlet.
4. 2 meter IEC mains cord with Australian plug is supplied with unit.
5. PB251A-B alarm terminal is DB25 female.
6. PB251A-B output and battery connector is Hirose pn. HS28R-4A. Mating connector is Hirose pn. HS28P-4A (not supplied).
7. PB251A-RML output terminals are M4 screws suitable for ring or fork lugs up to 9.5 mm wide.
8. PB251A-RML alarm terminals are M3.5 screws suitable for ring or fork lugs up to 8 mm wide.

PB251A-RML ALARM AND OUTPUT TERMINALS



PB251A-B OUTPUT & BATTERY CONNECTOR



- PIN1: + OUTPUT
- PIN2: - OUTPUT
- PIN3: + BATTERY
- PIN4: - BATTERY

PB251A-B ALARM CONNECTOR



- PIN 1: COMMON
- PIN 6: DC OK (NC)
- PIN 15: BATTERY OK (NO)

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