

PB314A Series:

Battery Charger System



FEATURES

- 636 - 1056W PSU for Battery Backup
 - DC UPS Connectable
 - Digital Display System
 - Rack Mounting
 - Constant Float Voltage & Current Limit
 - Circuit Breakers & Alarm Relays
 - Independent Battery Charging Output
- DC OK & Battery OK Alarms
 - Battery connected test
 - Optional LVD - Battery Low Volts Disconnected
 - Optional Network Connected
 - Optional Battery Temperature Probe
 - Operations Installation handbook Available

SPECIFICATIONS

MODEL	PB314A	
INPUT	Input Voltage	85-264 Vac or 120-360 Vdc
	Frequency	47 to 63 Hz
	Input Current	4.1A typical 200Vac
	Inrush Current	40A typical cold start 200Vac
	Line regulation	60mV maximum
OUTPUT	Output Voltage	13.8Vdc, 27.6Vdc, 55.2Vdc
	Output Power	624W - 1056W
	Output Current	See Selection Table
	Load Regulation	1% typical
	Ripple	160mVp-p maximum, 400mVp-p maximum
	Noise	180mVp-p maximum
	Overvoltage Shutdown	16.2 to 19.8V latching
	Output short circuit protection	Indefinite (Autoresetting)
	Load output protection	Thermal - Magnetic Circuit Breaker
	Battery output protection	Thermal - Magnetic Circuit Breaker
	Efficiency	79% typical
PROTECTION	Overvoltage shutdown	16.2 to 19.8V latching
	Output short circuit protection	Indefinite (Autoresetting)
	Battery charger short circuit protection	Indefinite (Autoresetting)
	Load output protection	Thermal - Magnetic Circuit Breaker

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	Battery output protection	Thermal - Magnetic Circuit Breaker.
	Isolation	Input - Output: 3KVac 1 min Input - Ground: 2KVac 1 min Output - Ground: 500Vac 1min
DISPLAY AND ALARMS	DC OK	LED Green On = OK, Voltage-free changeover contact (32V, 1A). Alarm on failure of AC/DC PSU and tripping of over temperature limit.
	AC OK	Neon Green On = OK, Voltage-free changeover contact (32V, 1A). Alarm on mains fail.
	Charger voltage OK alarm	LED Green On = OK, Voltage-free changeover contact (32V, 1A). Alarm on battery low voltage or on opening of battery circuit breaker.
	Battery low voltage alarm	10.8V / 21.6V / 43.2V
OPTIONAL FEATURES	Battery charge current	Option XXA: The battery charging current limit "XX" amps is set at time of manufacture. Often recommended by battery manufacturer given AH rating of battery. Or contact Powerbox for more information.
		See selection table
	Battery LVD disconnect	Option LVD: For 12V and 24V models, not available in 48V models
	Network enabled	Option N: Internal network card in conjunction with PB314A becomes a network enable device combining the benefits of SNMP V1, XML and an embedded web page.
	Temperature compensation	Option T: Temperature probe 2.5M cable Option T5: Temperature probe 5M cable Float voltage set to 2.3V per cell at 25°C with compensation of 3.3mV per cell
STANDARDS & APPROVAL	Output Alarm Connection	Option P: Phoenix Contact Mating Connector included
	C-Tick	AS/NZS CISPR11 Group 1 Class A.
	Safety	UL 60950 Class 1
	EMC	Emissions comply with AS/NZ CISPR22 Class-B
MECHANICAL	AC input socket	IEC320 fused / on off switch
	Output termination	Cage clamp terminals (-C version)
	Output Alarm Connection	Standard DB25 Socket Mating Connector not included
	Load fault current protection	63A circuit breaker
	Battery fault current protection	63A circuit breaker
	Rack mount size	270 D x 19" W x 2RU H
	Weight	5.0 kg
ENVIRONMENT	Operating temperature	20°C to +71°C, Derating linearly from 50°C to 71°C to 50% power
	Humidity	20-90% relative humidity (non-condensing)
	Cooling	Forced cooling - internal fan

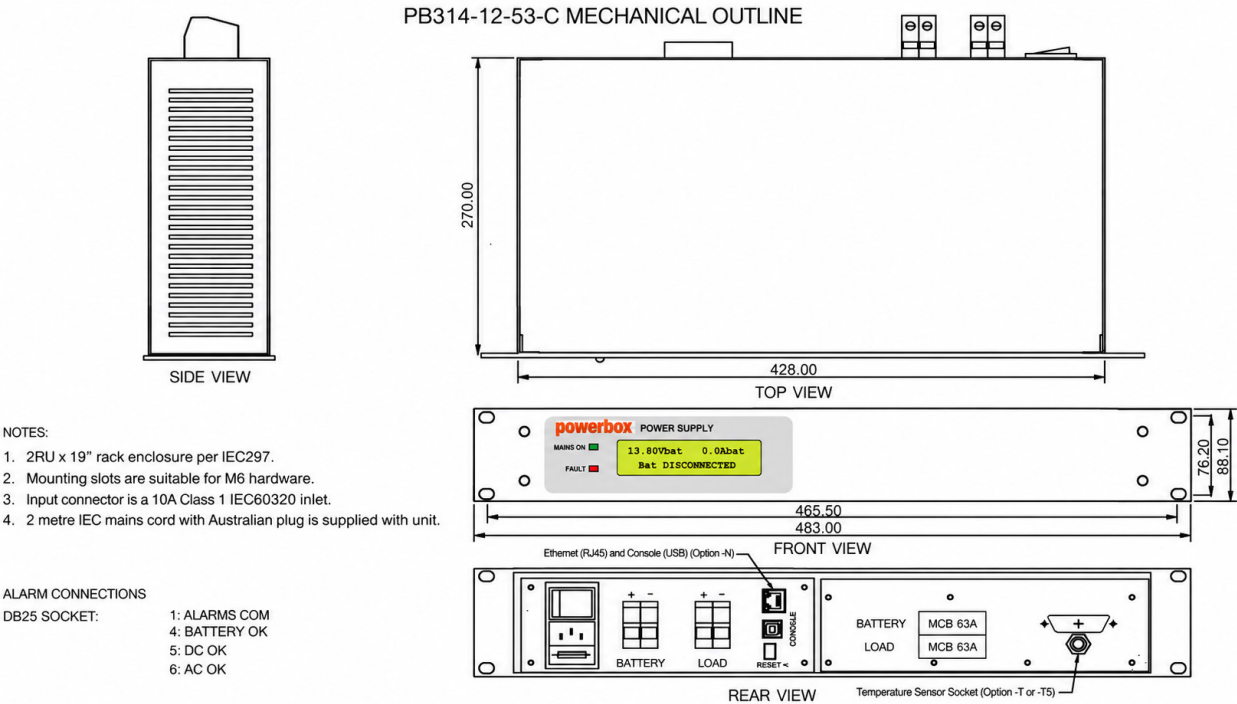
SELECTION TABLE

MODEL NUMBER	OUTPUT VOLTAGE	LOAD CURRENT	LOAD PK CURRENT	BATTERY CHARGE CURRENT	OUTPUT POWER
PB314A-12-53-C-XXA	13.8Vdc	46A	53A	5 - 53A	636W
PB314A-12-88-C-XXA	13.8Vdc	76A	88A	10 - 88A	1045W
PB314A-24-27-C-XXA	27.6Vdc	23A	27A	2.5 - 27A	648W
PB314A-24-44-C-XXA	27.6Vdc	38A	44A	5 - 44A	1056W
PB314A-48-13-C-XXA	55.4Vdc	11A	13A	2.5 - 13A	624W
PB314A-48-22-C-XXA	55.4Vdc	19A	22A	2.5 - 22A	1056W

NOTE

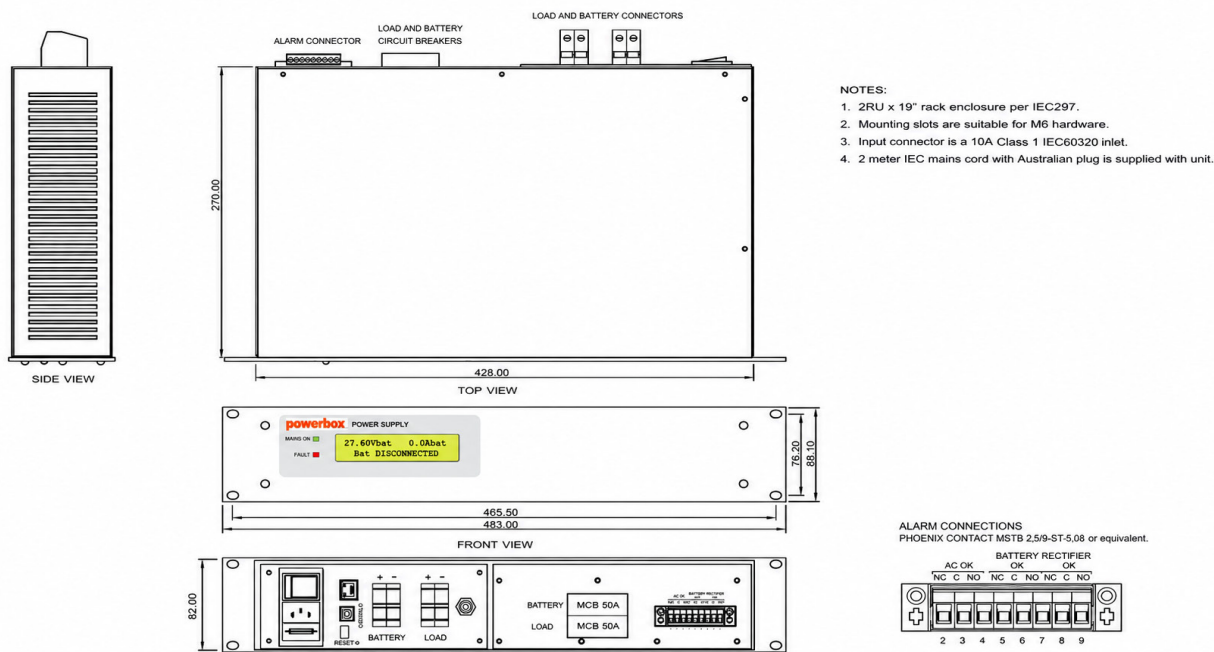
- 1. Output Load Current also includes Battery Charge Current.
- 2. The Battery Charging Current is factory set. Battery supplier to recommend or contact Powerbox for recommendation battery charge current. The 'XX' in model number designates the required battery charge current limit.

TECHNICAL DRAWINGS

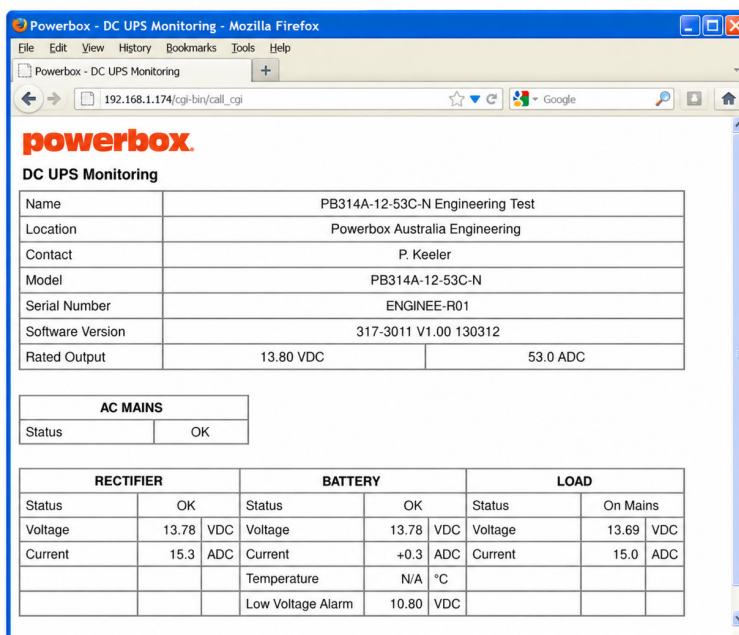


TECHNICAL DRAWINGS

PB314A WITH OPTION P: PHOENIX ALARM CONTACT



ETHERNET INTERFACE (Option -N)



Webpage displays the current status of the PB314A. This webpage regenerates automatically every 8 seconds.

Note: The temperature parameter "N/A" indicates that no battery temperature probe is attached to the PB314A