

# PB314 Series

636-745 WATTS DC UPS

## FEATURES

- Low RF noise
- Constant float voltage
- Constant current limited
- Over temperature protection
- Circuit breakers to protect battery and load circuits from fault current
- Alarm relays: AC mains fail, DC OK and Battery Low
- Option: Battery Low Voltage Disconnect (LVD)

## SPECIFICATIONS

INPUT	
Voltage:	85-264 vac or 120-360 vdc
Line regulation:	60mV maximum
Current:	4.1A typical 200VAC 8.2 typical 100VAC
Inrush current:	40A typical cold start 200V AC 20A typical cold start 100V AC
Frequency:	47 to 63 Hz
OUTPUT	
Voltage	See table
Current	See table
Load regulation	1% typical
Ripple	160mVp-p maximum
Noise	180m Vp-p maximum
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
Battery output protection	Thermal - Magnetic Circuit Breaker
ENVIRONMENT	
Operating temperature	-20 to 71°C derating linearly from 50-71° C to 50% power
Cooling	Forced cooling - internal fan
Efficiency	79% typical

## SELECTION TABLE

MODEL NUMBER	OUTPUT VDC	OUTPUT ILOAD	OUTPUT IBATT	OUTPUT POWER	OUTPUT TERMINATION
PB314-12-43-H	13.8V	43A	Remainder of I load	645W	Hirose connectors
PB314-12-43-C	13.8V	43A	Remainder of I load	645W	Cage clamp terminals
PB314-12-53-C	13.8V	53A*2	Remainder of I load	636W	Cage clamp terminals
PB314-12-43-H-LVD	13.8V	43A	Remainder of I load	645W	Hirose connectors
PB314-12-53-C-LVD	13.8V	53A*2	Remainder of I load	636W	Cage clamp terminals

\*1 Sum of load + batt charging current.

\*2 The max occasional load + batt current during charging. Max continuous load + batt current = 46A



STANDARDS & APPROVALS	
Safety	UL 60950 Class 1
EMC	Emissions comply with AS/NZ CISPR22 Class-B
Isolation input - output	3000V AC, 1 minute
input - ground	2000V AC, 1 minute
output - ground	500V AC 1 minute
DISPLAYS & 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.
Battery Ok	LED Green On = OK, Voltage-free changeover contact (32V, 1A). Alarm on battery low voltage or on opening of battery circuit breaker.
Battery low alarm voltage	11.0V
Option: Battery LVD disconnect	10.5V (-LVD version)
Battery LVD reconnect	12.0V (-LVD version)
Voltage meter	0-15V
Load current meter	0-100A
Battery current meter	-100A to +100A scale
MECHANICAL	
Rack mount size	270 D x 19" W x 2RU H
Weight	5.0 kg
Load fault current protection breaker	63 A
Battery fault current protection breaker	63 A
AC input socket	IEC320 fused / on off switch
Output termination	Hirose connector (-H version) Cage clamp terminals (-C version)
Alarm relay contacts	DB25 socket

# PB314 Series

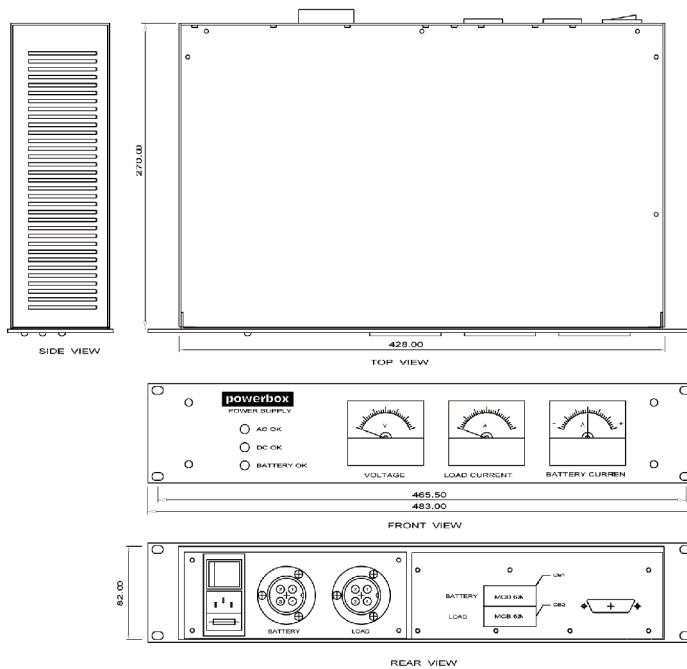
636-745 WATTS DC UPS

## SELECTION TABLE CONTINUED

MODEL NUMBER	OUTPUT	OUTPUT	OUTPUT		OUTPUT
	VDC	ILOAD	IBATT	POWER	TERMINATION
PB314-24-27-H	27.6V	27A*	Remainder of I load	745W	Hirose connectors
PB314-24-27-C	27.6V	27A*	Remainder of I load	745W	Cage clamp terminals
PB314-24-27-H-LVD	27.6V	27A*	Remainder of I load	745W	Hirose connectors
PB314-24-27-C-LVD	27.6V	27A*	Remainder of I load	745W	Cage clamp terminals

\*1 Sum of load + batt charging current.  
The MAX occasional load + batt current during charging.  
MAX continous load + batt current = 23A

### PB314-XX-H MECHANICAL OUTLINES

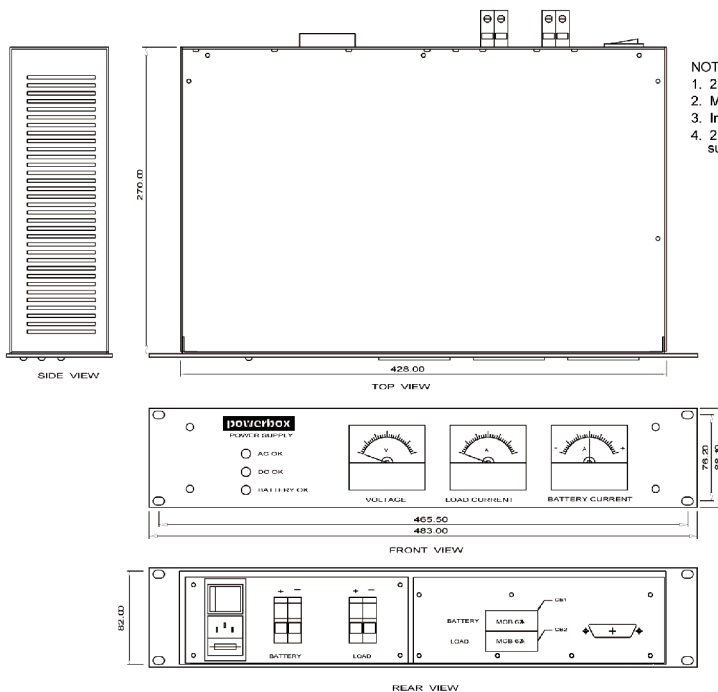


#### ALARM AND OUTPUT CONNECTIONS

- LOAD CONNECTOR:**
- 1: LOAD+
  - 2: LOAD-
  - 3: LOAD+
  - 4: LOAD-
- BATTERY CONNECTOR:**
- 1: BATT+
  - 2: BATT-
  - 3: BATT+
  - 4: BATT-

- DB25 SOCKET:**
- 1: ALARMS COM
  - 4: BATTERY OK
  - 5: DC OK
  - 6: AC OK

### PB314-XX-C MECHANICAL OUTLINES



#### ALARM CONNECTION

- DB25 SOCKET:**
- 1: ALARMS COM
  - 4: BATTERY OK
  - 5: DC OK
  - 6: AC OK