

# PBB2S Series:

## DC UPS / Battery Chargers



### FEATURES

- 13.8Vdc 3.5A and 7A and 27.6Vdc 3.5A power supplies with battery backup
- High reliability and high efficiency industrial-grade switching power converter
- Universal AC input range from 100Vac to 240Vac nominal without power derating
- Light weight corrosion resistant aluminium enclosure
- Output overcurrent and short circuit protection
- Separate current-limited battery charging output
- Output overvoltage protection
- Self-resetting battery fuse
- Overtemperature protection
- Green Mains/DC OK LED and 7A form-C alarm contact
- Green Battery OK LED and 7A form-C alarm contact
- Red Battery Fuse Fail LED

### SPECIFICATIONS

#### INPUT

Nominal Voltage	100-240Vac
Current	PBB2S-13-3.5: 1.3A PBB2S-13-7: 2.8A PBB2S-28-3.5: 2.8A
Nominal Frequency	50-60Hz
Power Factor	Conforms to EN61000-3-2

#### OUTPUT – AC MAINS OPERATION

Output Voltage	See Table
Output Current**	See Table
Battery Charging Current	See Table
Ripple and Noise*2	See Table
Short Circuit Protection	Hiccup, non-latching
Load+Battery Charging	Hiccup overcurrent prot'n >120% of rated current
Battery Charging	Current limited taper charger
Overvoltage Prot'n	Hiccup, non-latching
PBB2S-13-3.5/-7	16V +10%/-5%
PBB2S-28-3.5	32V ±10%

#### OUTPUT – BATTERY OPERATION

Voltage Drop	PBB2S-13-3.5: 0.47V typ.
Battery to Output	PBB2S-13-7: 0.55V typ. PBB2S-28-3.5: 0.47V typ.
Short Circuit Protection	Self-resetting battery fuse
Battery Reverse Polarity Protection	Indefinite

#### DISPLAYS / ALARMS

Mains/DC OK	Green LED: ON=OK Voltage-free changeover contact, 30Vdc, 7A rating
Battery OK	Green LED: ON=V <sub>batt</sub> >11.5V, 23.0V OFF=V <sub>batt</sub> <10.5V, 21.0V Voltage-free changeover contact, 30Vdc, 7A rating
Battery Fuse Fail	Red LED: ON=FAIL

#### STANDARDS

Safety	AS/NZS60950.1, Class I Certificate NSW26927
Isolation	I/P to Output 3.0 kVac, 1 min. I/P to Ground 1.9 kVac, 1 min. O/P to Ground 500 Vac, 1 min.
EMC	AS/NZS CISPR22 Class B

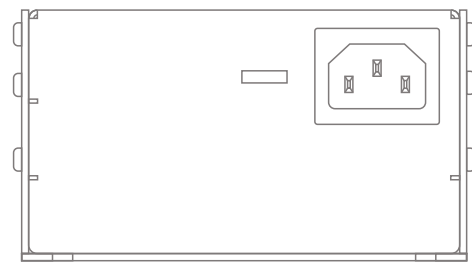
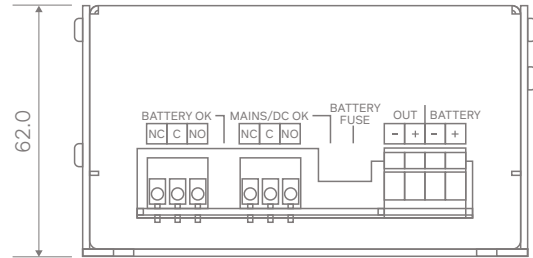
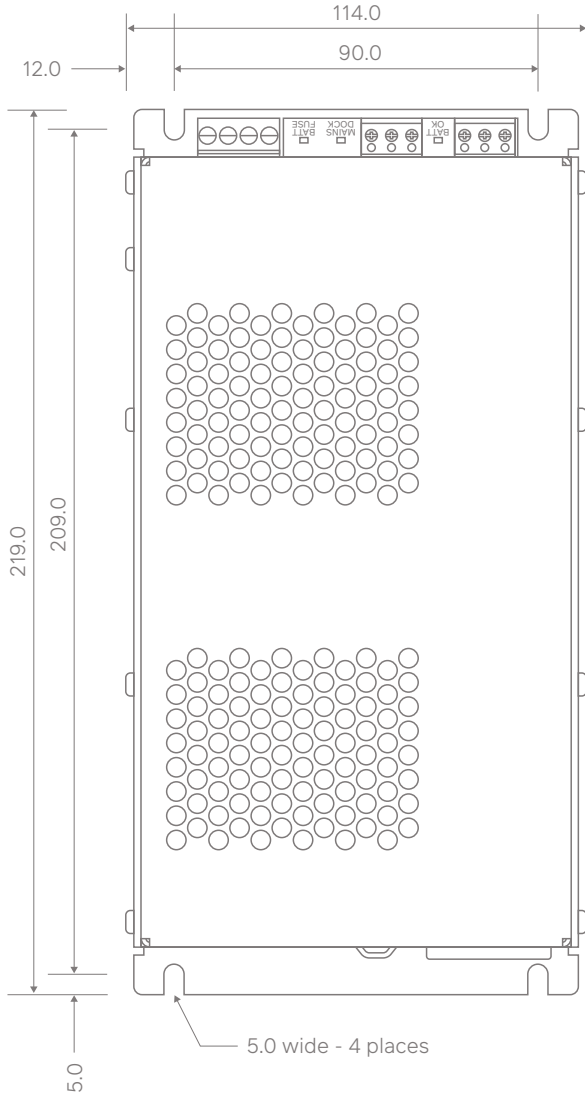
#### MECHANICAL AND ENVIRONMENTAL

Case Size	219x114x62mm (LxWxH)
Weight	PBB2S-13-3.5 600g PBB2S-13-7 900g PBB2S-24-3.5 900g
Operating Ambient Temp.	-10°C to 70°C
Derating	-2.5%/°C above 40°C
Cooling	Natural Convection
Overtemperature Protection	Automatic – Self resetting

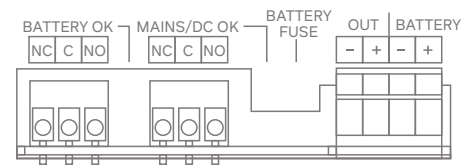
\*1 Sum of load + battery charging current.

\*2 BW=20MHz

**TECHNICAL DRAWINGS**



**TERMINATIONS**



Note: Alarm terminations show state in normal non-alarm conditions

**NOTES:**

1. AC Mains Termination:
  - 10A IEC60320 C14 Appliance Inlet
2. Output and Battery Terminations:
  - 4W Pluggable Screw Terminal Block
  - Suitable for up to 2.5 sq. mm wire
3. Alarms Terminations:
  - 3W Screw Terminal Blocks
  - Suitable for up to 1.5 sq. mm wire

**SELECTION TABLE**

Model Number	Output Voltage	Rated Total Output Current*1	Maximum Load Current	Battery Charging Current	Ripple and Noise*2
PBB2S-13-3.5	13.8Vdc	3.5A	3.25A	0.25A typ.	<100mVp-p
PBB2S-13-7	13.8Vdc	7.0A	6.0A	1.0A typ.	<100mVp-p
PBB2S-28-3.5	27.6Vdc	3.5A	3.0A	0.5A typ.	<150mVp-p