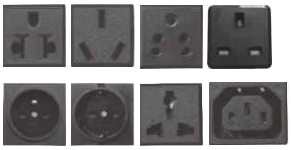
powerBOX®

UPS PBO 1 kVA ~ 3 kVA PF 0.9

Features

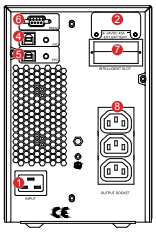
- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110 V ~ 300 Vac) and frequency range (40 ~ 70 Hz)
- Auto sensing frequency
- 50 / 60 Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Quick and stable charging, 90% capacity restored in 4h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)
- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, and 12 A charger (2/3 kVA only)



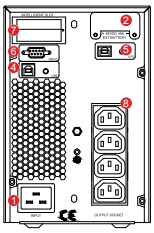
Optional outlets

Rear Panel

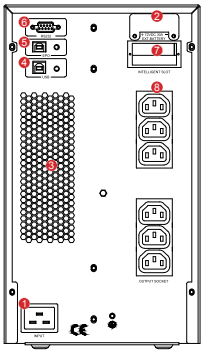
1. AC input socket
2. Battery connector (Optional)
3. Fan
4. USB (Optional)
5. EPO (Optional)
6. RS232
7. Intelligent slot (Optional)
8. Output sockets



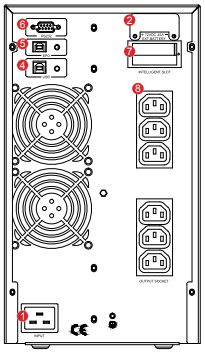
1kVAS



2kVAS (48V)



2kVAS (72V)



3kVAS

2021/2023
CATALOGUE REF.NO.PBR22

UPS PBO PBO UPS 1-3KVA

Specifications

MODEL	PBO901i			PBO902i			PBO903i		
Capacity	1 kVA / 900 W			2 kVA / 1800 W			3 kVA / 2700 W		
INPUT									
Rated voltage	208 / 220 / 230 / 240 Vac								
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)								
Frequency	40 ~ 70 Hz (auto-sensing)								
Power factor	≥ 0.99								
Bypass voltage range	- 25% ~ +15% (settable)								
Total harmonic distortion (THDi)	≤ 6%								
OUTPUT									
Voltage	208 / 220 / 230 / 240 Vac (settable via LCD)								
Voltage regulation	±1%								
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz±0.1 Hz (battery mode)								
Waveform	Sinusoidal								
Power factor	0.9								
Total harmonic distortion (THDv)	≤ 2% (linear load), ≤ 5% (non-linear load)								
Crest factor	3:1								
Overload	105% ~ 125% for 1 min, 125% ~ 150% for 30 s, > 150% for 300 ms								
BATTERIES									
DC voltage	24 V (S)	36 V (S)	36 V (H)	48 V (S)	72 V (S)	72 V (H)	72 V (S)	96 V (S)	96 V (H)
Inbuilt battery	2×9 Ah	3×7 Ah	/	4×9 Ah	6×7 Ah	/	6×9 Ah	8×7 Ah	/
Charging current (max.)	1 A		6 A	1 A		6 A	1 A		6 A
Recharge time	Standard model: 90% capacity restored in 3 hours; Long time model: depend on the capacity of battery								
SYSTEM									
Efficiency	≥ 90% (Mains mode)			≥ 91% (Mains mode)			≥ 92% (Mains mode)		
	≥ 85% (Battery mode)			≥ 86% (Battery mode)			≥ 87% (Battery mode)		
	≥ 95% (ECO mode)			≥ 96% (ECO mode)			≥ 97% (ECO mode)		
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)								
Protections	Short-circuit, overload, overtemperature, battery discharge protection and fan testing protection								
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP (optional)								
Display	LCD + LED								
Standards	EN 62040-1, EN 62040-2, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2, IEC 62040-2, IEC 62040-1, IEC 62040-3								
OTHERS									
Operating temperature	0℃ ~ 40℃								
Storage temperature	-25℃ ~ 55℃ (without batteries)								
Relative Humidity	0 ~ 95% (non-condensing)								
Altitude	≤ 1000 m, derating 1% for each additional 100 m								
IP rating	IP 20								
Noise level at 1m	≤ 50 dB								
Dimensions (W×D×H) (mm)	144 x 312 x 216	144 x 317 x 216	144 x 336 x 216	144 x 417 x 216	191 x 419 x 335	191 x 418 x 335	191 x 419 x 335		191 x 418 x 335
Packaged dimensions (W×D×H) (mm)	230 x 402 x 315	230 x 460 x 315	232 x 417 x 318	230 x 506 x 315	277 x 500 x 435	318 x 533 x 471	277 x 500 x 435		277 x 500 x 435
Net weight (kg)	11	12.8	6	16.4	23.1	10.5	24.3	29.4	11
Gross weight (kg)	11.3	14	7	17.8	24.7	12	25.9	31.1	12.5

- Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208 Vac.
- S means standard model, H means long time model.
- All specifications are subject to change without notice.
- Custom-made specifications are acceptable.

www.powerboxups.com info@powerboxups.com

powerBOX