Technical Data

Inverter	PBX-200 Pb	PBX-200 Li
Rated grid voltage	230 V	
Rated frequency	50 Hz	
Harmonic distortion	<4%	
Continuous power at 25°	200 W	
Power for 5 sec. at 25°	230 W	
Power for 3 sec. at 25°	370 W	
Maximum load	Up to short-circuit	
Cos φ	0.1 to 1	
Grid / generator input		
Input voltage	230 V ±15%	
Frequency range	47 - 64 Hz	
Grid charger current	5 A	
Charging characteristics	IUoU[1]	Li BMS[1]
Resettable fuse	10 A	
Transfer connectors		
Transfer voltage	230 V ±15%	
Frequency range	47 - 64 Hz	
Resettable fuse	10 A	
Solar input		
Solar charger type	MPP[2]	
Input voltage range	30 - 45 V	
PV current	8 A	
Maximum PV power	250 W	
Recommended PV power	200 W	
Charging characteristics	IUoU[1], temperature regulated	Li BMS[1], temperature regulated
Battery		
Included batteries	2 x Hoppecke sun power VR M 12 V 58	2 x Li-Ion batteries 12 V 50 AH
Battery technology	Lead acid / AGM[3]	Lithium / LiFePO4[4]
Internal battery voltage	24V	
Cycle stability	2500 cycles	5000 cycles
Expected lifetime	3 - 5 years	> 10 years
DC Output		
Cigarette lighter socket	12 V, 3 A	
USB socket	2 x 5 V, 2 A	
Connectors		
Solar	Neutrik powerCON TRUE1 inlet / clamps	
Transfer / stacking	Neutrik powerCON inlet / clamps	
Transfer cable	1.3m cable with Neutrik powerCON plug	
Grid / generator	Grid socket C14, 10A / clamps	
Clamps	Tool-less Phoenix clamps, 0.2 - 6mm2	
Swarm connection		
Stacking possibility	Via attached cable	
Connecting towers	Via attached cable	
Maximum tower height	3 units	
Maximum stacking / transfer power	10 units / 2.3 kW	
Maximum swarm-grid size	Infinite[6], tested up to 20 units	
Certificates		
EMC (Electro Magnetic Compatibility)	IEC/EN55022, IEC/EN61000	
Safety	EC/EN62109-1, IEC62109-2	
Environmental conditions		
Protection index	IP20	
Relative humidity in operation	95% without condensation	
Operating temperature range	-10 to 45°C[5]	-20 to 60°C
Ventilation	Passive, no active ventilators	
Warranty	2 years	5 years
General data		
Weight	52 kg (114.6 lb)	27 kg (59.5 lb)
Dimensions (W / H / D)	400mm / 443mm / 400mm	

[1] IUoU = Multiple charge stages to optimize the charge cycles of the batteries.
BMS = Battery Management System

[2] MPP = Maximum Power Point Tracker to reach up to 30% higher solar performance

[3] AGM = Absorbent Glass Mat, electrolyte is held in the glass mats

[4] LiFePo4 = Lithium iron phosphate

[5] At constant operation temperature above 30°C the batteries age substantially faster

[6] Theoretical value, that has to be tested first in practice for this new technology