



DATASHEET
Single-Phase Hybrid/AC Inverter
HI-3.0 / 3.7 / 4.6 / 5.0 / 6.0
AC1-3.0 / 3.7 / 4.6 / 5.0 / 6.0



Barcelona Series

HYBRID /AC INVERTER

Harness the power of the sun day and night with the ground-breaking range of Hybrid & AC inverters from **SOLARBOX**.



SOLARBOX storage solutions are available with advanced and intuitive app based remote control and monitoring functionality.



Easy Installation

Flexible configuration, plug and play set-up, **built-in fuse protection**



High Voltage

Connects to high-voltage batteries for maximum round-trip efficiency.



IP65 Rated

Engineered to last with maximum flexibility. Suitable for outdoor installation.



Remote Monitoring

Monitor your system remotely via smartphone app or web portal.



BATTERY EXPANSION EASY UPGRADE



Expand your system easily by simply adding additional batteries. There are six battery size options, and Max. seven batteries can be installed in series, providing up to 18.2kWh of storage capacity.

For more about the **SOLARBOX** range, visit: solarbox.es



TECHNICAL SPECIFICATIONS

Model	H1-3.0-E	H1-3.7-E	H1-4.6-E	H1-5.0-E	H1-6.0-E
INPUT PV (FOR HYBRID ONLY)	AC1-3.0-E	AC1-3.7-E	AC1-4.6-E	AC1-5.0-E	AC1-6.0-E
Max. recommended DC power [w]	4500	5550	6900	7500	9000
Max. DC voltage [V]			600		
Nominal DC operating voltage [V]			360		
Max. input current [A]			12.5 /12.5		
Max. short circuit current [A]			15/15		
MPPT voltage range [V]			80/550		
No. of MPP trackers	2	2	2	2	2
Strings per MPP tracker	1	1	1	1	1
Start-up voltage [V]			75		
OUTPUT AC					
Nominal AC power [VA]	3000	3680	4600	4999	6000
Max. apparent AC power [VA]	3000/3300	3680/4048	4600	5500	6600
Rated grid voltage (AC voltage range) [V]			220/230/240 (180 to 270)		
Rated grid Frequency [Hz]			50/60		
Nominal AC current [A]	13	16	20	21.7	26.1
Max. AC current [A]	14.4	16/18	21	21.7	28.71
Displacement power factor			0.8 leading to 0.8 lagging		
Total harmonic distortion (THDi, rated power)			<3%		
INPUT AC					
Nominal AC power [VA]	3000	3680	4600	4999	6000
Nominal AC current [A]	13	16	20	21.7	26.1
Max. AC current [A]	14.4	16	21	21.7	26.1
Rated grid voltage (AC voltage range)[V]			220/230/240 (180 to 270)		
Rated grid Frequency [Hz]			50/60		
Power Factor			0.8 leading to 0.8 lagging		
BATTERY					
Battery voltage range [V]			85-450		
Recommended battery voltage [Vdc]			300		
Max. charge /discharge power [W]			6000		
Max. charge/discharge current [A]			35		
Communication interfaces			CAN/RS485		
Reverse connect protection			YES		
EPS OUTPUT (WITH BATTERY)					
EPS MAX poer [VA]	5000	5000	6000	6000	6600
EPS rated power [VA]	4000	4000	5000	5000	6000
EPS rated voltage [V], Frequency [Hz]			230VAC, 50/60		
EPS rated current [A]	17.4	17.4	21.7	21.7	26.1
EPS peak power [W]			7200,10s		
Total harmonic distortion (THDv, linear Load)			<2%		
Compatible with the generator			Yes		
Switch time [ms]			<20		
EFFICIENCY					
MPPT efficiency	99.90%	99.90%	99.90%	99.90%	99.90%
Euro-efficiency	97.00%	97.0%	97.00%	97.00%	97.00%
Max. efficiency	97.80%	97.80%	97.80%	97.80%	97.80%
Max. efficiency (PV to BAT) @full load	98.50%	98.50%	98.50%	98.50%	98.50%
Max. efficiency (BAT to AC) @full load	97.00%	97.00%	97.00%	97.00%	97.00%
POWER CONSUMPTION					
Standby consumption [W] (Idle)			<3		
Idle mode			YES		
STANDARD					
Safety			IEC62109-1/2/IEC62040		
EMC			EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3		
Certification	G98 / VDE-AR-N-4105 /G99 / AS4777 / EN50438 / CEI 0-21 / VDE 2510 /NRS097-2-1				
ENVIRONMENT LIMIT					
Ingress protection			IP65		
Operating temperature range [°C]			-20..... +60 (DERATING AT +45)		
Humidity [%]			0~~100(non-condensing)		
Altitude [m]			<2000		
Storage temperature [°C]			-40.....+70		
Noise emission (typical) [dB]			40		
Over voltage category			III (electric supply side), II (PV side)		
GENERAL DATA					
Dimmensions (WxHxD) [mm]			430*410*178		
Weight [kg]			23		
Cooling concept			Natural		
Topology			Transformerless		
Communication	Ethernet, Meter, WIFI/GPRS/LAN (optional), DRM, USB, CT				
Button			Capacitive Touch Sense		