



Energy Storage & Hybrid Inverter

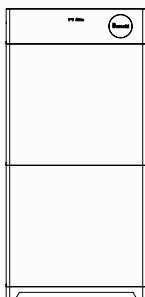
At the heart of the Borochi system lies the combination of modular energy storage and a hybrid inverter. Together, they enable higher self-consumption, reduced grid dependency, and reliable power availability during outages.

The modular storage architecture allows capacity expansion as household energy demand evolves. The hybrid inverter coordinates energy flow between photovoltaic generation, storage, household loads, and the grid.

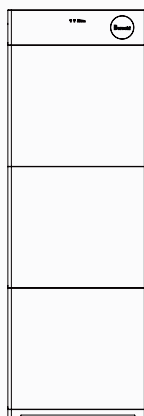


Model	BRH008KH-B1	BRH010KH-B1	BRH012KH-B1	BRH015KH-B1
PV Input				
Recommended Max. PV Input Power [Wp]	10400	13000	15600	18750
Max. Input Voltage [V]		1000		
MPPT Voltage Range [V]		180 - 950		
Rated Voltage [V]		600		
Start-up Voltage [V]		200		
No. of MPP Trackers		2		
No. of PV Strings per MPPT	1/1		2/1	
Max. Input Current per MPPT [A]	15/15		30/15	
Max. Short-Circuit Current per MPPT [A]	18/18		36/18	
AC Output				
Rated Output Power [W]	8000	10000	12000	15000
Rated Output Current [A]	11.6	14.5	17.4	21.7
Max. Output Current [A]	12.7	16	19	23.8
Max. Apparent Output Power [VA]	8800	11000	13200	16500
Rated Output Voltage [V]		220/380; 230/400		
Rated Grid Frequency [Hz]		50/60		
Power Factor [cosφ]		1/0.8 (leading) - 0.8 (lagging)		
THDi (@Rated Output Power)		< 3%		
AC Input (Grid)				
Max. Apparent Input Power [VA]	8800	11000	13200	16500
Max. Input Current [A]	12.7	15.9	19.1	23.8
Rated Output Voltage [V]		220/380; 230/400		
Rated Grid Frequency [Hz]		50/60		
Battery				
Battery Module Type		Lithium Iron Phosphate (LiFePO4)		
Battery Voltage Range [V]		150 - 600		
Max. Charging/Discharging Current [A]		25		
Battery Communication		CAN		
AC Output (Off-Grid)				
Rated Output Power [W]	8000	10000	12000	15000
Rated Output Voltage [V]		220/380; 230/400		
Rated Output Frequency [Hz]		50/60		
Rated Output Current [A]	11.6	14.5	17.4	21.7
THDi (@Rated Output Power)		< 3%		
Switch Time [ms]		< 10		
Peak Apparent Power, Duration [VA, s]	12000, 30	15000, 30	18000, 30	22500, 30
Efficiency				
Max. Efficiency		98%		
Euro Efficiency		97.3%		
Charging/Discharging Efficiency of the Battery		98.5%@Charge / 97.0%@Discharge		
Protection				
DC-Switch		Integrated		
Insulation Resistance Detection		Integrated		
Input Reverse Polarity Protection		Integrated		
Anti-island Protection		Integrated		
Residual Current Monitoring		Integrated		
Overtemperature Protection		Integrated		
DC Surge Protection		Integrated (Type II)		
AC Surge Protection		Integrated (Type II)		
General Data				
Dimensions (W×H×D) [mm]		498 × 563 × 200		
Weight [kg]		28		29
Display		LCD / Web / App		
Communication		WiFi / RS485 / LAN		
Operating Temperature Range [°C]		-25 to +60		
Relative Humidity		≤ 95%, non-condensing		
Operation Altitude [m]		≤ 4000 (Derating above 2000)		
Self Consumption (night) [W]		< 15		
Topology		Transformerless		
Cooling Concept		Natural Convection		Smart Fan Cooling
Ingress Protection (IP) Rating		IP66		
Warranty		10 Years		
Certification		VDE 4105; EN IEC 62109-1/2; EN IEC 61000-6-1/3; CE; RoHS		

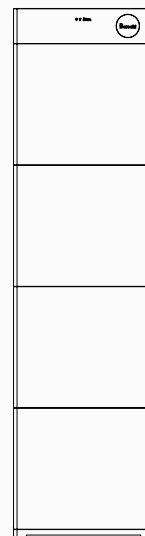
Model	BOR-5120-H2	BOR-5120-H3	BOR-5120-H4
Performance			
Number of Battery Modules	2	3	4
Rated Capacity [kWh]	10.24	15.36	20.48
Usable Capacity [kWh]	9.21	13.81	18.41
Rated DC Voltage [V]	204.8	307.2	409.6
Operating Voltage Range [V]	160 - 233.6	240 - 350.4	320 - 467.2
Rated Charging/Discharging Power [kW]	5.12	7.68	10.24
Rated Charging/Discharging Current [A]		25	
Max. Charging/Discharging Current [A]		50	
Max. Depth of Discharge (DoD)		90%	
General Data			
Charging Temperature Range [°C]		0 to +50	
Discharging Temperature Range [°C]		-20 to +50	
Recommended Storage Temperature [°C]		-30 to +60	
Relative Humidity		≤ 95%, non-condensing	
Operating Altitude [m]		≤ 4,000 (Derating above 2,000)	
Weight [kg]	146.5	211.4	276.6
Dimensions (W×H×D) [mm]	600 × 1240 × 265	600 × 1760 × 265	600 × 2280 × 265
Ingress Protection (IP) Rating		IP65	
Installation		Floor Installation	
Cooling		Natural Convection	
Battery Technology		Lithium Iron Phosphate (LiFePO ₄)	
Display		SoC, Operating Status	
Communication		CAN	
Warranty		10 Years (≥ 80% usable capacity)	
Certification		IEC 60730-1; IEC 62619; EN IEC 62477; EN 62477-1; EN IEC 61000-6-1/2/3/4; UN 38.3; CE; CB; RoHS	



1 × BOR-5120-H
2 × BOR-5120



1 × BOR-5120-H
3 × BOR-5120



1 × BOR-5120-H
4 × BOR-5120