

BOXER HF

HIGH - FREQUENCY HYBRID SOLAR INVERTER

Lithium and Lead Acid

Battery Compatible



Single Phase Hybrid MPPT Inverters (4.8-6 KVA)*

This hybrid inverter efficiently converts solar DC into clean, stable AC power for residential use, while intelligently managing battery storage. Excess solar energy is stored for later, and the system seamlessly coordinates power flow between the solar array, batteries, and the utility grid - maximising self-consumption, backup readiness, and overall energy efficiency.



IP66 Rated



Broad MPPT Range (60-450V)



2x PV Overload Capacity



Switch Over $\leq 10\text{ms}$



Up to 12 Units Parallel



Battery-less Operation

TECHNICAL SPECIFICATIONS

RATINGS	4.8kW/48V	6.6kW/48V
Model No.	BHF-HBD-048-4K800-1P-10.0M2	BHF-HBD-048-6K800-1P-13.2M2
A. MPPT CHARGER		
Type (Boost)	MPPT	
Max. PV Access Power (W)	20kW	26kW
Max. PV Input Power (W)	10kW	13.2kW
Max. PV Strings in Parallel	1	1
Number of MPPT	2	
Max. Open Circuit PV Volts (Voc)	500V	
PV Short Circuit Current (Isc)	27A/27A	
Nominal Voltage (V)	350V	
MPPT Voltage Range (Full Load)	250-450V	330-450V
MPPT Voltage Range (Vmp)	60-450V	
PV DC Input Current (A)	20A/20A	
Max. MPPT Charging Efficiency (%)	97.5%	
B. SOLAR INVERTER		
Nominal Capacity (W)	4.8kW	6.6kW
Output Current (A)	21A	30A
Output Voltage/Freq/Phase	230V(± 1%) / 50Hz/ 1P+N	
Power Factor (PF)	0.8-Unity	
Max. Conversion Efficiency (%)	96.5%	
Over Loads: 60sec/ 30sec/ 10sec*	110%/150% /200%/>200% Immediate trip *	
Auto Bypass Feature	Provided	
Anti Islanding/Power Export to Grid	Provided (As per IEC 62116 & IEC 61727)	
C. BATTERY INPUT		
Battery Type	VRLA/Lead-Acid/Lithium-ion/NiCd	
Nominal Battery Voltage/Range (V)	48V/40-60V	
Max. Discharging Current (A)	100A	140A
D. GRID INPUT		
Grid Nomial Voltage/Range (V)	230V/184 - 253V	
Grid Rated Frequency/Range (Hz)	50Hz/47.5 - 50.5Hz	
Grid rated Input Current (A)	40A	50A
Max Grid Import Power (W)	8kW	10kW
E. PROTECTIONS & DISPLAY PARAMETERS		
PROTECTIONS		
PV Side	<ul style="list-style-type: none"> • Reverse Polarity, PV Power Limit,O/U voltage • O/U Voltage, Current Limit • O/U Voltage, O/U Frequency • Overloads, Short circuit • Over Temperature 	
Battery Side		
Grid Side		
Load Side		
System Protection		
F. MISCELLANEOUS		
LED Indications	Inverter ON, Load On Grid/Charging, System Alarm/Trip	
Data Port (RS485/RS 232)	Optional (Available on Request)	
Remote Monitoring	Optional through GPRS based Modem/WIFI	
Ingress Protection	IP66	
Over Voltage Category	VOC II (DC), VOC III (AC)	
Inverter topology	Battery Isolation	
Cooling Method	Force Cooling (Temp Controlled)	
Operating Temperature	0 - 60 °C (>45 °C Derating)	
Humidity	Max. 95% Non-Condensing	
Altitude	1000m above sea level	

Statcon Energiaa Pvt. Ltd. reserves the right to modify or withdraw any of the ratings or technical specifications.