

JDA Hybrid Solar Inverter HBI 30 / HBI 50 / HBI 120 / HBI 150

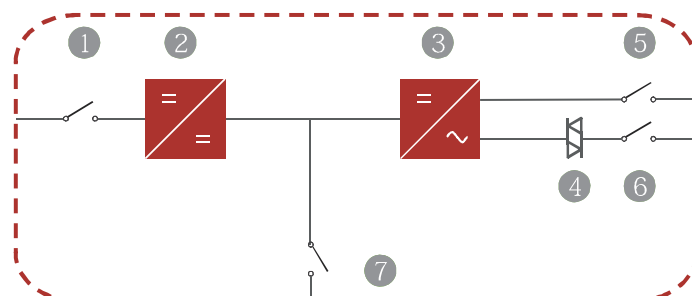


Leading - edge Technology

- ▶ All in one solution with PV,battery,load and grid integrated
電池、負載和電網，可集中成一個解決方案
- ▶ Expandable PV controller for flexible PV capacity design
可擴展PV控制器用於靈活的PV容量設計
- ▶ Touch Screen LCD
觸控LCD面板
- ▶ Flexible Battery Type (li-ion,lead-acid)
柔性電池類型（鋰離子，鉛酸）
- ▶ Comprehensive Protection for Inverter and Battery
變頻器和電池的全面保護
- ▶ Multiple Working Mode Presetable
可預設多種工作模式
- ▶ Battery Forecast (discharge time, capacity, etc)
電池預測（放電時間，容量等）
- ▶ CAN and RS485 Communication Interface, Modbus Protocol
CAN和RS485通訊接口，Modbus協議
- ▶ Seamless transfer between on and off grid via build in transfer switch
通過轉換開關在開關之間無縫傳輸
- ▶ Build-in transformer for grid isolation
用於電網隔離的內置變壓器

模塊示意圖

Block Diagram



- | | |
|---------------------------|--------------------|
| 1. PV breaker | 5. Load breaker |
| 2. PV controller | 6. Grid breaker |
| 3. Bidirectional Inverter | 7. Battery breaker |
| 4. Transfer switch | |

AC(Grid-connected)

	JDA HBI 30	JDA HBI 50	JDA HBI 120	JDA HBI 150
Rated power	38kVA	60kVA	150kVA	188kVA
AC active power	30kW	48kW	120kW	150kW
Rated voltage	400V	400V	400V	400V
Voltage Range	360V - 440V	360V - 440V	360V - 440V	360V - 440V
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Frequency range	47~51.5/57~61.5Hz	47~51.5/57~61.5Hz	47~51.5/57~61.5Hz	47~51.5/57~61.5Hz
THDI	<3%	<3%	<3%	<3%
PF	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading	0.8lagging~0.8leading
AC connection	3/N/PE	3/N/PE	3/N/PE	3/N/PE

AC(Off-grid)

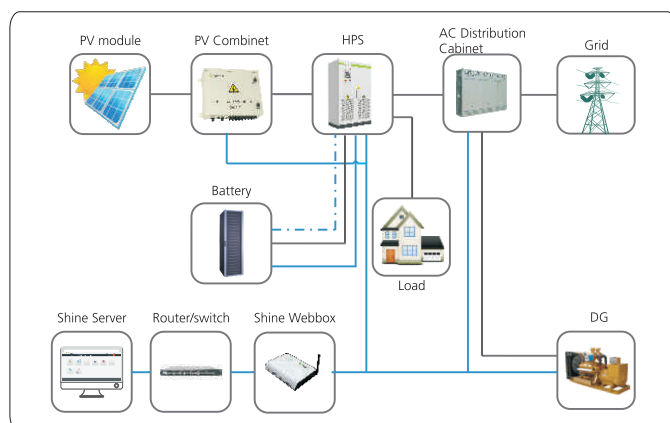
Rated power	38kVA	60kVA	150kVA	188kVA
AC active power	30kW	48kW	120kW	150kW
Rated voltage	400V	400V	400V	400V
THDU	≤1%linear	≤1%linear	≤1%linear	≤1%linear
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Overload capability	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min	110%-10 mins 120%-1 min

DC

Max. voltage of the PV production	1000 VDC	1000 VDC	1000 VDC	1000 VDC
Max. PV power	33kWp	55kWp	132kWp	165kWp
PV MPPT voltage range	480VDC-800VDC	480VDC-800VDC	480VDC-800VDC	480VDC-800VDC
*Battery voltage	352V-600V	352V-600V	352V-600V	352V-600V

General Data

Dimension (W/D/H)	950/750/1850mm	950/750/1850mm	1350/750/1850mm	1350/750/1850mm
Weight	350KG	500KG	650KG	750KG
Operating Temperature Range	-25 °C ... +55 °C	-25 °C ... +55 °C	-25 °C ... +55 °C	-25 °C ... +55 °C
Relative Humidity	0 ~95%	0 ~95%	0 ~95%	0 ~95%
Degree of Protection	IP20	IP20	IP20	IP20
Noise Emission	65dB(A)@1m	65dB(A)@1m	65dB(A)@1m	65dB(A)@1m
Maximum Operating Altitude	6000m (Derating over 3000m)	6000m (Derating over 3000m)	6000m (Derating over 3000m)	6000m (Derating over 3000m)
Cooling	Air Forced	Air Forced	Air Forced	Air Forced
Display	Touch screen LCD	Touch screen LCD	Touch screen LCD	Touch screen LCD
Communication Interface	RS485/Ethernet	RS485/Ethernet	RS485/Ethernet	RS485/Ethernet
Transfer time	≤10ms	≤10ms	≤10ms	≤10ms



- power cable
- RS485 communication
- - - CAN communication

* Battery voltage upper limit should be calculated according to below equation:
 $V_{battery\max} = (V_{mpp} - 100) * V_1 / V_2$
 $V_{battery\max}$ is max allowed battery string voltage; V_{mpp} is PV string mppt voltage;
 V_1 is battery cell rated voltage; V_2 is battery cell boost charge voltage