



## Hybrid **HBI®** HBI 30/ HBI 50 / HBI 100 / HBI 120 / HBI 150

### **HBI® LEADING - EDGE TECHNOLOGY**

Hybrid inverter from 30kW to 150kW for small and middle capacity commercial application. all-in-one solution supporting solar, load, DG, grid and battery connection.

#### **Features**

- ▶ Programmable working modes
- ▶ Comprehensive protections
- ▶ Touch screen LCD
- ▶ Seamless transfer on/off grid
- ▶ Compatible with high-voltage battery
- ▶ Parallel for scalability

**AC(Grid-connected)**

	<b>HBI 30</b>	<b>HBI 50</b>	<b>HBI 100</b>	<b>HBI 120</b>	<b>HBI 150</b>
Apparent power	33kVA	55kVA	110kVA	150kVA	165kVA
Rated power	30kW	50kW	100kW	120kW	150kW
Rated voltage	400V	400V	400V	400V	400V
Rated current	43A	72A	144A	173A	217A
Voltage range	360V - 440V	360V - 440V	360V - 440V	360V - 440V	360V - 440V
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Frequency range	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz	45~55/55~65Hz
THDi	<3%	<3%	<3%	<3%	<3%
PF	0.8lagging~0.8leading	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	3/N/PE
Transformer	yes	yes	yes	yes	yes

**AC(Off-grid)**

Rated power	33kVA	55kVA	110kVA	132kVA	165kVA
Rated power	30kW	48kW	100kW	120kW	150kW
Rated voltage	400V	400V	400V	400V	400V
Rated current	43A	72A	144A	173A	217A
THDU	≤ 2% linear	≤ 2% linear	≤ 2% linear	≤ 2% linear	≤ 2% linear
Rated frequency	50/60Hz	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	110% -10 mins 120% -1 min

**DC(battery and PV)**

Max PV Open-circuit voltage	1000VDC	1000VDC	1000VDC	1000VDC	1000VDC
Recommended PV power	30kWp	50kWp	100kWp	120kWp	150kWp
PV MPPT voltage range	480VDC - 800VDC	480VDC - 800VDC	480VDC - 800VDC	480VDC - 800VDC	480VDC - 800VDC
Nominal battery voltage	420V	420V	420V	420V	420V
Battery voltage	352-600V*	352-600V*	352-600V*	352-600V*	352-600V*
Max charging power	30kW	50kW	100kW	120kW	150kW
Max charging current	85A	142A	285A	340A	425A

**General Data**

Dimension (W/D/H)	950/750/1860mm	950/750/1860mm	1200/800/1900mm	1200/800/1900mm	1400/800/1900mm
Weight	440kg	620kg	900kg	1024kg	1250kg
Environmental temperature	-25 °C ... +55 °C	-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%	0 ~95%
Protection degree	65dB(A)@1m	65dB(A)@1m	65dB(A)@1m	65dB(A)@1m	65dB(A)@1m
Noise emission	IP20	IP20	IP20	IP20	IP20
Standby consumption	6000m	6000m	6000m	6000m	6000m
Cooling	<30W	<30W	<30W	<30W	<30W
	Forced-air	Forced-air	Forced-air	Forced-air	Forced-air

**Communication**

Display	Touch screen	Touch screen	Touch screen	Touch screen	Touch screen
Communication interface	RS485/CAN	RS485/CAN	RS485/CAN	RS485/CAN	RS485/CAN

\* Battery voltage is determined by the following equation:

$$V_{min} = 352 \times V_n / V_1, V_{max} = (V_{mpp} - 100) \times V_n / V_2, V_{max} < 600VDC$$

V1 is battery cell discharge cut-off voltage, V2 is battery cell boost charge voltage, Vn is battery cell nominal voltage.