



HNI HV SERIES

Three Phase Hybrid Inverter

5-30 kw

Hanersun three phase storage inverters are designed to increase energy independence for residential and commercial users. The power range is up to 30kW, compatible with high voltage (150-800V) batteries.

Peak saving model significantly reduce the amount of energy purchased from public grid.

UPS function (switch time < 10ms), enables the crucial loads power on during outages. Additionally, under the backup operation mode, the inverter provides you up to 150% peak output overloading.



WIDE RANGE
Voltage Range(150-800V)

Max. **40A**

MAX. 40A
String Current Up To 40A

Max. **1.5**

PV OVERSIZE
1.5 Times PV Oversize



UNBALANCE
Support Unbalance Load

<**10**
ms

UPS FUNCTION
Switch Time < 10ms



INPUT
Support Generator



Support for
Time-of-use Optimization



AFCI (Optional) & Rapid Shutdown Ready



Configurable
Operation Modes



100% unbalanced output, each phase;
200% unbalanced output, each phase (Below 10kW)

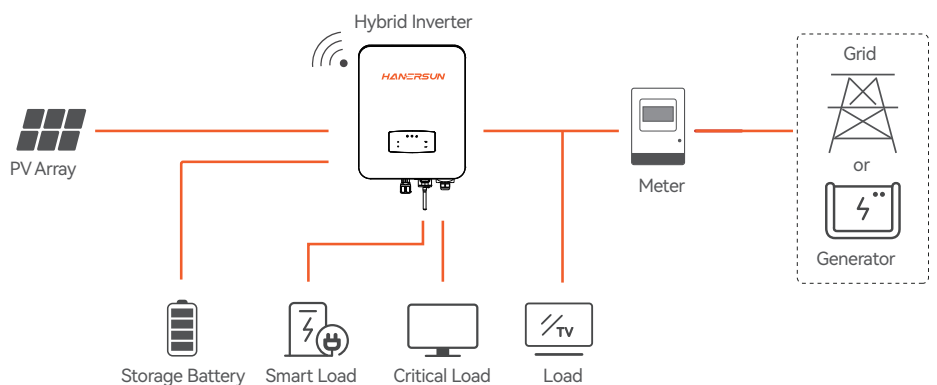


Build in Anti-feed-in
Function



Smart Monitoring & Remote Firmware Upgrade

New Storage System



PV Inputs	HNI5K-HV	HNI8K-HV	HNI10K-HV	HNI12K-HV	HNI15K-HV	HNI20K-HV	HNI30K-HV
Max. DC Input Power (kW)	7.5	12	15	18	22.5	30	45
Max. PV Voltage (V)	1000	1000	1000	1000	1000	1000	1000
Rated DC Input Voltage (V)	620	620	620	620	620	620	620
DC Input Voltage Range (V)	150 - 1000	150 - 1000	150 - 1000	150 - 1000	150 - 1000	150 - 1000	150 - 1000
MPPT Voltage Range (V)	150 - 850	150 - 850	150 - 850	150 - 850	150 - 850	150 - 850	150 - 850
Full MPPT Range(V)	200 - 850	300 - 850	500 - 850	500 - 850	500 - 850	500 - 850	500 - 850
Start-up Voltage (V)	160	160	160	160	160	160	160
Max. DC Input Current (A)	20 x 2	20 x 2	20 x 2	20 x 2	20 + 32	32 x 2	40 x 2
Max. Short Current(A)	30 x 2	30 x 2	30 x 2	30 x 2	30 + 48	48 x 2	60 x 2
No. of MPPT Tracker / Strings	2/2	2/2	2/2	2/2	2/3	2/4	2/4
Battery Port							
Battery Nominal Voltage (V)	200	300	400	450	500	500	550
Battery Voltage Range (V)	150-800	150-800	150-800	150-800	150-800	150-800	150-800
Max. Charge/Discharge Current (A)	30	30	30	30	50	50	60
Max. Charge/Discharge Power (W)	5K	8K	10K	12K	15K	20K	30K
Charging Curve	3 Stages						
Compatible Battery Type	Li-ion / Lead-acid						
AC Grid Output							
Nominal AC Output Power (VA)	5000	8000	10000	12000	15000	20000	30000
Max. AC Input Power	7500	12000	15000	18000	25500	30000	45000
Max. AC Output Current (A)	8.5	13.5	17	21.5	27	32	48
Nominal AC Voltage (V)	230/400						
Nominal AC Frequency (Hz)	50/60						
Power Factor	1 (- 0.8 - 0.8)						
Current THD (%)	< 3 %						
AC Load Output (Back-up)							
Nominal Output Power (VA)	5000	8000	10000	12000	15000	20000	30000
Nominal Output Voltage (V)	230/400	230/400	230/400	230/400	230/400	230/400	230/400
Nominal Output Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Nominal Output Current (A)	7.3	11.5	14.5	17.4	21.8	29	43.5
Peak Output Power	5500VA, 60s	8800VA, 60s	11000VA, 60s	13200VA, 60s	16500VA, 60s	22000VA, 60s	33000VA, 60s
THDV (with linear load)	< 3 %						
Switching Time (ms)	< 10						
Efficiency							
Europe Efficiency	97.50%	97.50%	97.50%	97.50%	97.50%	97.80%	98.10%
Max. Efficiency	98.00%	98.20%	98.20%	98.30%	98.30%	98.30%	98.50%
Battery Charge/Discharge Efficiency	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
Protection							
Reverse Polarity Protection	Yes						
Over Current / Voltage Protection	Yes						
Anti-islanding Protection	Yes						
AC Short-circuit Protection	Yes						
Leakage Current Detection	Yes						
Ground Fault Monitoring	Yes						
Grid Monitoring	Yes						
Enclosure Protect Level	IP65						
General Data							
Dimensions (W x H x D, mm)	558 x 535 x 260 mm						
Weight (kg)	29kg	29kg	29kg	29kg	29kg	29kg	36kg
Topology	Transformerless						
Cooling Concept	Natural Convection	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan	Intelligent Fan
Relatively Humidity	0 - 100 %						
Operating Temperature Range (°C)	- 25 to 60 °C						
Operating Altitude (m)	< 4000						
Noise Emission (dB)	<30	<30	<30	<30	<40	<40	<40
Standby Consumption (W)	< 5						
Display & Communication Interfaces	CD, LED, RS485, CAN, Wi-Fi, GPRS, 4G						
Certification & Approvals	EN50549-1, VDE-AR-N4105, IEC62040, IEC62109-1, IEC62109-2						
EMC	EN61000-6-2, EN61000-6-3						

HNB-HV

High Voltage
Stackable Energy
Storage Battery

7.5-20 kWh



KEY FEATURES



Expansion Flexibility

2.5kWh auto-recognition modular design, scalable from 7.5kWh to 20kWh.



More Usable Energy

90% depth of discharge, package level energy optimization.



Environment Adaptability

Can adapt to wide range of temperature: -10°C-55°C. IP 65 ingress protection.



Perfect Compatibility

Compatible with residential three phase inverters.



Easy Installation

25kg per battery module, one-person installation. No cable connection required, plug and play.



Safe & Reliable

Lithium iron phosphate(LFP) cell. Built-in BMS &Passive protection by fuse and aerosol.



Temperature Control (optional)

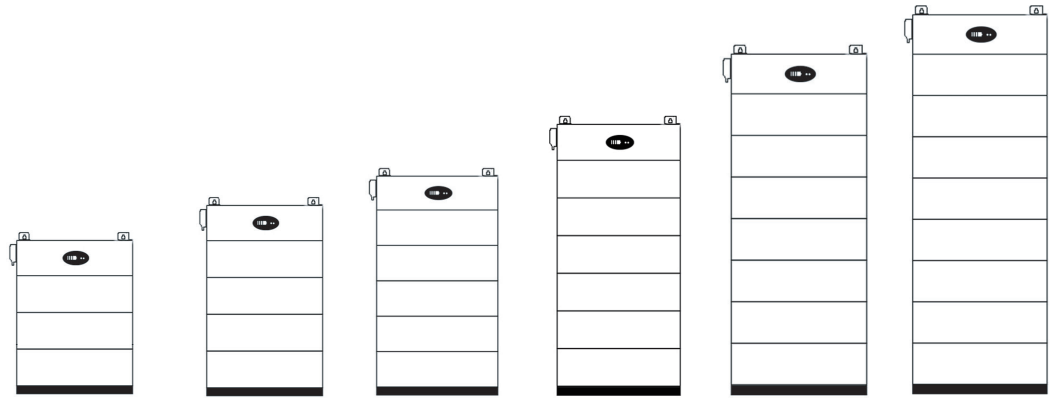
Built-in electric thermal film design ensures system stability in winter.



Real Time Monitoring

Remote maintenance and upgrades.

PRODUCT PARAMETER



Mode	HNB7.5K-HV	HNB10K-HV	HNB12.5K-HV	HNB15K-HV	HNB17.5K-HV	HNB20K-HV
Nominal Voltage	144V	192V	240V	288V	336V	384V
Connection	1P45S	1P60S	1P75S	1P90S	1P105S	1P120S
Voltage Working Nominal	114.7V-159.7V	153V-213V	191.2V-266.2V	230V-319V	267.7V-372.7V	306V-426V
Capacity(kWh)	7.488kWh	9.984kWh	12.48kWh	14.976kWh	17.472kWh	19.968kWh
Weight	~ 80kg	~105kg	~129kg	~152.3kg	~176.2kg	~199.5kg
Dimension(L*W*H mm)	606x220x730	606x220x900	606x220x1070	606x220x1240	606x220x1410	606x220x1580
Capacity	52Ah					
Battery Type	LiFePO4					
Max. Charge Current(A)	35A					
Installation	Floor Installation					
Max. Discharge Current(A)	35A					
Recyclable	Fully recyclable at the end of life					
IP Protection	IP 65					
Cycle Life	>6000. 25°C, 0.5C 90%DOD					
Storage	-20°C~+35°C					
Working Temperature(°C)	Charge: 0°C~+55°C Discharge:-20°C~+55°C					
Transportation SOC	30%					

CERTIFICATES



UN38.3

WARRANTY

5 YEARS