



## 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)

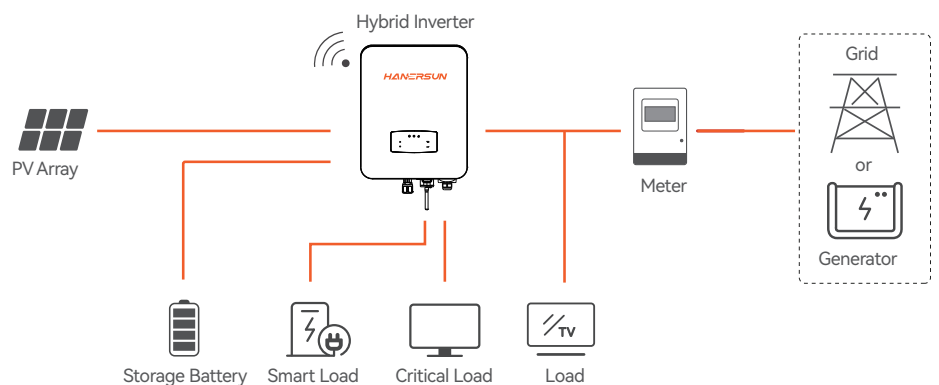


Build in Anti-feed-in  
Function



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
<b>Battery Port</b>							
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						
<b>AC Grid Output</b>							
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 %						
<b>AC Load Output (Back-up)</b>							
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						
<b>Efficiency</b>							
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%
<b>Protection</b>							
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						
<b>General Data</b>							
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						