

NAHUI

N3PH-1N5/6/8/10K

Three-phase Hybrid Inverter (HV)



Compact size with maximum performance



High performance

Up to 18A PV current input, 20-30% improvement



Super efficiency

Battery charge and discharge efficiency 10-15% higher than low voltage product



Smart control

Support remote firmware upgrade and set working modes



High yields

Supports 1.5 DC:AC ratio to connect more PV capacity

Model	N3PH-1N5K		N3PH-1N6K		N3PH-1N8K		N3PH-1N10K	
								
Input DC (PV side)								
Recommended max. PV power	7.5 kW		9 kW		12 kW		15 kW	
Max. input voltage	1000 V							
Rated voltage	600 V							
MPPT voltage range	160 ~ 950 V							
Start-up voltage	160 V							
MPPT number	2							
Max. input strings number per MPPT	1							
Max. input current per MPPT	18 A / 18 A							
Max. short circuit current per MPPT	23 A / 23 A							
Battery								
Battery type	Li-ion							
Rated Battery Voltage	160 ~ 700 V							
Max. charge / discharge current	30 A		30 A		30 A		30 A	
Output AC (Grid side)								
Rated output power	5 kW		6 kW		8 kW		10 kW	
Max. apparent output power	5.5 kVA		6.6 kVA		8.8 VA		11 VA	
Rated grid voltage	220/ 380 V / , 230/400 V, 3 L/ N / PE							
Rated grid frequency	50 / 60 Hz							
Rated grid output current	7.6 A		9.1 A		12.2 A		15.2 A	
Power factor	0.8 leading - 0.8 lagging							
THDi	< 3%							
Intput AC (Grid side)								
Max. apparent intput power	10 kW		12 kW		16 kW		20 kW	
Rated input current	15.2 A		18.2 A		24.3 A		30.4 A	
Rated input voltage	3 L / N / PE, 220/380 V / , 230 / 400 V							
Rated input frequency	50 / 60 Hz							
Output AC (Back-up)								
Rated output power	5 kW		6 kW		8 kW		10 kW	
Max. apparent output power	7.5 kVA, 60 s		9 kVA, 60 s		12 kVA, 60 s		15 kVA, 60 s	
Back-up switch time	< 20 ms							
Rated output current	7.6 A		9.1 A		12.2 A		15.2 A	
Rated output voltage	3 L / N / PE, 220/ 380 V / , 230 / 400 V							
Rated frequency	50 / 60 Hz							
THDv (@linear load)	<3 %							
Efficiency								
Max. efficiency	98.00%		98.00%		98.00%		98.00%	
EU efficiency	97.70%		97.70%		97.70%		97.70%	
Protection								
DC Insulation Monitoring	Yes							
Input Reverse Polarity Protection	Yes							
Anti-islanding Protection	Yes							
Residual Current Monitoring	Yes							
Over-heat Protection	Yes							
AC Overcurrent Protection	Yes							
AC Short Circuit Protection	Yes							
AC Overvoltage Protection	DC:II/AC:II							
DC Surge Protection	Yes							
AC Surge Protection	Yes							
General Data								
Dimensions (W x H x D)	520 x412 x187 mm							
Weight	27 kg							
Topology	Transformerless							
Operating ambient temperature range	-25°C ~ +60°C I (-13 ~ +140°F)							
Protection rating	IP65							
Cooling concept	Natural Convection							
Max. operation altitude	2000 m							
Operation Humidity	0 ~ 100 %							
Grid connection standard	VDE-AR-N4105, EN 50549-PL, CEI 0-21, UNE 217002, AS/NSZ 4777.2:2020							
Safety / EMC standard	CE, IEC/EN 62109-1/-2, EN 61000-6-1/-3							
Features								
Display	LCD + OLED							
Communication	RS485, Wi Fi							
Noise	< 35db							