

N3PH-1N5/6/8/10K

Three-phase Hybrid Inverter



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. PV power for single MPPT	7500Wp	9000Wp	9000Wp	9000Wp
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%			
Input AC (Grid side)				
Max. apparent input 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	WiFi			
Noise	< 35dB			

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