Three Phase Hybrid Inverter

THH-30KW/40KW/50KW-EU-1



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100% three-phase unbalanced output, with each phase capable of delivering up to 50% of the rated power.

- Ac coupling to retrofit existing solar system.
- Max. 10 pcs parallel for on-grid and on-grid.

Support multiple batteries parallel.

- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator





ADVANTAGES-FEATURES

Technical Data

Model	THH-30KW-EU-1	THH-40KW-EU-1	THH-50KW-EU-1
PV Input			223550115
Maximum DC Input Power (W)	39000	52000	65000
Maximum DC Input Voltage (V)		1000	
Start-up Voltage (V)		180	
MPPT Range (V)		150-850	
Full Load DC Voltage Range (V)	360-850	360-850	450-850
Rated DC Input Voltage (V)		600	
Input Current (A)	36+36+36	36+36+	36+36
Maximum DC Short Circuit Current (A)	55+55+55	55+55+	55+55
Number of MPPTs	3	4	
Number of MPPT strings per circuit	2+2+2	2+2+	2+2
AC Output			
Rated AC Output Power (W)	30000	40000	50000
Maximum AC Output Power (W)	33000	44000	55000
AC Output Current (A)	45.6	60.8	76
Maximum AC Output Current (A)	50.2	66.9	83.6
Three-phase unbalanced output current (A)	60	70	83.3
Maximum Continuous AC Current (A)		200	
Peak Power (off-grid)		1.5 times rated power, 10S	
Generator Input/Smart Load/AC Even	45.5/200/45.5	60 .7 / 200 / 60 .7	75.8/200/75.8
Power Factor	45.57200745.5	0.8leading-0.8lagging	10.01200110.0
AC Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380Vac 230/400Vac		
Grid Type	50/60Hz, SL/N/PE 220/300Vac 230/400Vac		
Current Harmonics	<3% (of nominal power)		
Grid DC Component		<0 . 5% In	
Battery			
Battery voltage range (V)	160-800		
Maximum charge current (A)	50+50		
Maximum discharge current (A)	50+50		
Number of Battery Inputs	2		
Li-Ion Battery Charging Strategy		Adaptive BMS	
Efficiency			
Maximum Efficiency	97 .6%		
European Efficiency	97.0%		
MPPT Efficiency		99.9%	
Protection			
Islanding protection		yes	
DC reverse polarity protection	yes		
Insulation impedance detection	yes		
Leakage current monitoring protection	yes		
Output overcurrent protection	yes		
Output short circuit protection	yes		
Surge protection	yes		
Arc fault circuit interruption (AFCI optional)			
Overcurrent protection	yes DC Type II/AC Type III		
Certifications and Standards		Do Type in Ao Type in	
Grid Approvals		IEC61727/62116, EN50549-1	
	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
Safety/EMC Standards	180/EN 6100	10-0-112/0/4, TEG/EN 02109-1, TEC/	LIN 02105-2
Other Parameters		05.00	
Operating Ambient Temperature Range (°C)	-25 °C ~ +60 °C		
Cooling Method	Natural air cooling		
Noise Index (dB)	<45 dB		
BMS Communication Port	CAN		
Monitoring Method	WIFI , APP		
Dimensions ((W / H / D))	527×894×294 (excluding connectors and bracket)		
Weight	80kg		
Protection Class	lp65		
Installation	Wall-mounted		
		5 years (10 years optional)	