

Three Phase Hybrid Inverter



KEY STRENGTHS



100% unbalanced output, each phase;
Max. output up to 1/3 rated power



Seamless transfer to EPS within 10 ms



Multiple MPPTs, applicable to
complicated roof designs



High voltage battery, higher efficiency



Max. 13 A for a single MPPT, compatible with
up to 210mm PV panels



Up to 3 levels of loads, ensure the
electrical stability

Model	ZH-HP3H-6K -EU	ZH-HP3H-8K -EU	ZH-HP3H-10K -EU	ZH-HP3H-12K -EU	ZH-HP3H-15K -EU
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	125-600				
Max. Charging Current (A)	50	50	50	50	50
Max. Discharging Current (A)	50	50	50	50	50
Temperature Sensor	Yes				
Charging Curve	Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (kW)	9	12	15	18	22.5
Full power MPPT Voltage Range(V)	250-850	330-850	430-850	510-850	620-850
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	180-850				
Full Load DC Voltage Range (V)	350-650				
PV Input Current (A)	13/13				13/13
Max. PV Isc (A)	16/16				25/25
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1				
AC Output Data					
Rated AC Output Active Power (W)	6000	8000	10000	12000	15000
Max AC Output Active Power (W)	6600	8800	11000	13200	16500
AC Output Rated Current (A)	8.7	11.5	14.4	17.3	21.7
Max AC Output Current (A)	9.5	12.7	15.9	19.1	23.8
Max. Three-phase Unbalanced Output Current (A)	9.5/19	12.7/25.4	15.9/31.8	19.1/38.2	23.8/47.6
Max Output short circuit current (A)	80				
Max. Continuous AC Passthrough (A)	50				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 380/400Vac				
Grid Type	Three Phase				
THDi	<3%				
Efficiency					
Max. Efficiency	97.9%	97.9%	98.2%	98.2%	97.6%
Euro Efficiency	97.2%	97.2%	97.5%	97.5%	97.8%
MPPT Efficiency	99.9%				
Protection					
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, All-pole sensitive residual current monitoring unit, AC Output Over Current Protection, AC Over Voltage Protection, AC Output Short Circuit Protection,				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
Grid Regulation	Europe EN 50549-1, Poland EN 50549-1, Germany VDE 4105, South Africa NRS 097-2-1, UK G98/G99, Spain UNE217001/UNE217002, Hungary EN50449-1				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-3-2/3/ 11/12, IEC/EN 62109-1/2				
General Data					
Operating Temperature Range (°C)	-25 -60 °C				
Cooling	Natural Cooling				
Noise (dB)	≤25 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	30	31	31	33	34
Cabinet Size (WxHxD mm)	530 ×560 ×220 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				