

Single Phase Hybrid Inverter



KEY STRENGTHS



Small, light, easy to install, can save 50% installation cost



Suitable for the latest 210mm high-power PV panel ($I_{sc}=18.5A$)



High efficiency, improve the battery charging and discharging efficiency to 96%



Support mobile phone (Bluetooth +WIFI) setting and maintenance



The high power can cover 3~8kW to meet the single-phase load requirements of users



Support 6 machines in parallel

Model	ZH-HP1L-3K -EU	ZH-HP1L-3.68K -EU	ZH-HP1L-4K -EU	ZH-HP1L-4.6K -EU	ZH-HP1L-5K -EU	ZH-HP1L-6K -EU	ZH-HP1L-8K -EU
Battery Data							
Battery Voltage Range(V)	40-58						
Max. Charging Voltage(V)	58						
Max.Charge/Discharge Current(A)	60	72	80	92	100	120	160
Communication Interface	CAN						
PV String Input Data							
Max. DC Input Power (kW)	4.5	5.4	6	6.9	7.5	9	12
Max. DC Input Voltage (V)	500						
Start-up DC Input Voltage (V)	100						
MPPT Operating Range (V)	125-500						
Max. DC Input Current (A)	16/16	16/16	16/16	16/16	16/16	16/16	16/32
No.of MPP Trackers	2						
No.of Strings per MPP Tracker	1	1	1	1	1	1	2+1
AC Output Data							
Rated Output Power (kW)	3	3.68	4	4.6	5	6	8
Max. Active Power (kW)	3.3	3.68	4.4	4.6	5	6.6	8.8
Nominal Output Voltage / Range (V)	L/N/PE 230/176-270V						
Rated Grid Frequency (Hz)	50 / 60						
Operating Phase	Single Phase						
Max. AC Output Current (A)	14.3	16	19.1	20	21.7	28.7	38.3
Output Power Factor	1(0.99 leading to 0.99 lagging)						
Grid Current THD	<3%						
Efficiency							
Max. Efficiency	98.2%						
Euro Efficiency	97.5%						
MPPT Efficiency	99.9%						
Protection							
Grounding detection	Yes						
Arc Fault Protection	Yes						
Island Protection	Yes						
Battery reverse Polarity	Yes						
Insulation Resistor	Yes						
Detection Residual Current	Yes						
Monitoring Unit Output Over Current	Yes						
Back-up Output Short Protection	Yes						
Terminal temperature detection	Yes						
Output Over Voltage Protection	Yes						
Output Under Voltage Protection	Yes						
General Data							
Cabinet Size (WxHxD mm)	451x474x212						467x200x484
Weight (kg)	18						20
Topology	Transformerless						
Internal Consumption(W)	<3						
Running Temperature	-25-60°C						
Ingress Protection	IP65						
Noise Emission (Typical)	≤35 dB						
Cooling Concept	Natural						
Max. Operating Altitude Without Derating	2000m						
Warranty	5 years						
Grid Connection Regulation	Europe: EN 50549-1:2019/AC:2019, Poland:EN50549-1:2019/Rfg:2016/NC Rfg:2018/PTPIREE:2021, Germany:VDE-AR:N 4105:2018/DIN VDE V0124-100(VDE V0124-100):2020, South Africa:NRS 097-2-1:2017 Edition 2.1, UK:G98/G99/1-6:2022, Spain:UNE217001:2020/UNE217002:2020/NTS V2.1:2021-07, 1EC61727:2004/IEC62116:2014/1EC61683:1999, Hungary:EN50549-1:2019/RFG:2016/Hungary						
Operating Surroundings Humidity	0- 95%(non-condensing)						