Haier Energy

SINGLE-PHASE HYBRID INVERTER

HH1P-7/8/9/10KL-A



Support DC/AC ratio 200%[1]

Adapted to high-inductance / weak grid,stable operation

4ms seamless switching between on-grid and off-grid

45°C without derating

Adaptive battery compatibility

Colorful LCD touch screen, more friendly

IP66 for outdoor installation

Supports six charge/ discharge time slots

Supports 16-unit parallel connection

Critical load management

Haier Energy

	HH1P-7KL-A	HH1P-8KL-A	HH1P-9KL-A	HH1P-10KL-A
PV String Input Data				
Max. Input Power (W)	14000	16000	18000	18000
Max. Input Voltage (V)	550			
MPPT Voltage Range (V)	125-425			
Full Load MPPT Voltage Range (V)	240-425	240-425	250-425	250-425
Start-up Voltage (V)	100			
Rated Input Voltage (V)	370			
Max. Input Current per MPPT (A)	18+18/18+18			
Max. Short Circuit Current per MPPT (A)	29+29/29+29			
Number of MPPT	2			
Number of Strings per MPPT	2/2			
Battery Input Data				
Battery type	Li-ion/Lead-acid			
Rated Battery Voltage (V)	48			
Battery Voltage Range (V)	40 ~ 60			
Max charge / discharge Current (A)	160	190	190	190
Peak Overload Current (A)	200	237.5	237.5	237.5
Max charge / discharge Power (W)	7000	8800	8800	8800
Communication	RS485/CAN			
AC Input / Output Data (On-grid)				
Max. Input Power (W)	10500	12000	13500	15000
Rated Output Power (W)	7000	8000	9000	10000
Peak Apparent Power (W)	13300 (@200ms)	15200(@200ms)	17100 (@200ms)	19000(@200ms)
Rated Output Voltage (V)	230			
Rated Frequency (Hz)	50			
Rated Output Current (A)	30.5	35	39	43.5
Max. Input/Output Current (A)	45.8/30.5	52.5/35.0	58.5/39.0	65.3/43.5
Power Factor	1.0 (-0.8~ +0.8)			
AC Output Data (Stand Alone)				
Rated Output Power (W)	7000	8000	9000	10000
Rated Output Voltage (V)	230			
Rated Frequency (Hz)	50			
Rated Output Current (A)	30.5	35	39	43.5
Power Factor	1.0 (-0.8~ +0.8)			
AC Input Data (Generator)				
Rated Input Power (W)	7000	8000	9000	10000
Rated Input Voltage (V)	230			
Rated Frequency (Hz)	50			
Rated Input Current (A)	30.5	35	39	43.5
Efficiency				
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%
Max. Efficiency	97.60%	97.60%	97.60%	97.60%
European Efficiency	97.00%	97.00%	97.00%	97.00%
General Data				
Operating Temperature Range (°C)	-25 to +60 (Derating 45)			
Humidity	0-100%			
Altitude (m)	≤ 2000 (>2000 Derating)			
Cooling Method	Natural cooling			
Communication	WIFI			
Display	LCD Color Touchscreen			
Weight (kg)	30.5			
Dimension (W × H × D mm)	451 × 652 × 243			
Topology	Non-isolated (PV- AC) / High frequency isolated (Battery Side)			
Ingress protection	IP66			
Mounting Method	Wall-mounted			
Protective class	Class I			
Overvoltage category	OVC III (AC Main), OVC II (PV)			
Warranty	5 years			
Parallel Units	16			
Protection and Certifications and Standards				
Integrated	PV Input Lightning Protection / Anti-islanding Protection / DC circuit breaker / PV String Input Reverse Polarity Protection / Insulation Resistor Detection / Residual Current Monitoring Unit / Output Over Current Protection / Output Shorted Protection / Output Over Voltage Protectior			
Safety EMC / Standard	EN61000-6-1. EN61000-6-3			
Grid Regulation	NRS2017, IEC61683, IEC62116, IEC61727			

*1: 10kW Support DC/AC ratio 180%