

# H1PL-1J3/3.6/8/6K-EU

## Single-phase Hybrid Inverter (LV)



**Includes AFCI module, for added safety**



### Arc fault detection

Integrated AFCI function, actively detects arc faults in PV Array



### Safe

IP66 protection



### High Yields

Supports 1.6 DC: AC ratio to connect more PV capacity



### Flexible



### Harsh environment

Operable at an altitude of 4000 meters<sup>1</sup>

Model	H1PL-1J3K-EU	H1PL-1J3.6K-EU	H1PL-1J5K-EU	H1PL-1J6K-EU
				
<b>Input DC (PV side)</b>				
Recommended max. PV power	4.8kW	5.7kW	8kW	9.6 kW
Max. input voltage		600V		
Rated voltage		330V		
Start-up voltage		90V		
MPPT voltage range		90-520V		
Max. input current		16 A / 16 A		
Max. short circuit current		24 A / 24 A		
MPPT number		2		
Max. number of input strings per MPPT		1		
<b>Battery</b>				
Battery type		Li-ion / Lead-acid		
Battery voltage range		42 - 58V		
Max. charge / discharge power	3kW	3.6kW	5kW	6kW
Max. charge / discharge current	62.5 A	75 A	105 A	125 A
Communication		CAN/RS485		
<b>Output AC (Grid side)</b>				
Rated output power	3 kW	3.6 kW	5 kW	6 kW
Max. apparent output power	3kVA	3.6kVA	5 kVA	6 kVA
Operation phase		1L/N/PE		
Rated grid voltage		220/230V		
Rated grid frequency		50 / 60Hz		
Rated grid output current	13.6 A / 13 A	16.4 A / 15.7 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	13.6 A / 13 A	16.4 A / 15.7 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)		
THDi		< 2 %		
<b>Input AC (Grid side)</b>				
Input voltage range		187 - 253 V		
Max. input current	20.5 A	24.6 A	32 A	40 A
Frequency range		45 - 55 Hz / 55 - 65 Hz		
<b>Output AC (Back-up)</b>				
Rated output power	3 kW	3.6 kW	5 kW	6 kW
Max. apparent output power	4.2 kVA, 60 sec	5 kVA, 60 sec	7 kVA, 60 sec	8 kVA, 60 sec
Back-up switch time		< 10 ms		
Rated output voltage		1L / N / PE, 220 / 230V		
Rated frequency		50 / 60Hz		
Max. output current	19.1 A	22.7 A	31.8 A	36.4 A
THDv (@linear load)		< 2 %		
<b>Efficiency</b>				
Max. efficiency		>97.5%		
EU efficiency		>96.2%		
<b>Protection</b>				
DC reverse-polarity protection		Yes		
Ground fault monitoring		Yes		
Residual current monitoring		Yes		
Integrated AFCI (DC arc-fault circuit protection)		Yes		
Protection class/Over voltage category		I/II		
<b>General Data</b>				
Dimensions (W x H x D)		405 x 480 x 205 mm		
Weight		24.2 kg		
Topology		High frequency isolation (for battery)		
Operating ambient temperature range		-25 ~ +60°C (13 ~ 140°F)		
Protection rating		IP66		
Cooling concept		Natural convection		
Max. operation altitude		4000 m <sup>1</sup>		
Grid connection standard		EN 50549-1, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21		
Safety / EMC standard		IEC/EN 62109-1/-2, EN 61000-6-1/-2/-3/-4		
<b>Features</b>				
DC connection		MC4 connector		
AC connection		Quick connection plug		
Display screen		LED + APP		
Communication		RS485, CAN, WiFi, LAN		
Noise		< 35 dB		

<sup>1</sup> possible derating occurring

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Nahui - Haier's Renewable Energy Platform