

YINERGY PRODUCT RESIDENTIAL



## HI1P SERIES Hybrid Inverter

1 Phase | 2MPPTS  
3kw | 3.68kw | 4kw | 4.6kw | 5kw | 6kW

### High-Efficiency



Max. charging / discharging current of 120 A



200% PV oversized and up to 110% AC output



200% peak EPS apparent power, 10s



Empowered by SiC, improved 0.3% average efficiency

### Economic

- Max. DC input current 16A, support for high power solar panel
- >20% power equipped with optimizer
- 90V low start-up voltage brings longer operation time

- 1kWh/5days more by weak-light power generation
- <5 W Standby Consumption

### Safety

- IP66 meets multi-scenario protection
- < 10 ms UPS-level switching time

- AI Powered AFCI Protection (optional)
- DC/AC Integrated SPD-II protection

### Intelligent

- Lithium-ion & Lead-acid battery compatible
- Intelligent loads management (e.g., Heat pump, EV Charger)

- Flexible expansion for microgrid

	HI-1P3K -L-Y1	HI-1P3.68K -L-Y1	HI-1P4K -L-Y1	HI-1P4.6K -L-Y1	HI-1P5K -L-Y1	HI-1P6K -L-Y1
<b>PV Input</b>						
Max. PV Array Power	6000 W	5500 W	8000 W	7000 W	1000 W	12000 W
Max. Input Power	4500 W	5500 W	6000 W	7000 W	7500 W	9000 W
Max. Input Voltage	550 V					
Rated Input Voltage	360 V					
Start-up Input Voltage	90 V					
MPPT Operating Voltage Range	90 V-520 V					
Max. Input Current	16 A					
Max. Short-circuit Current	23 A					
No. of MPP Trackers	1	2	2	2	2	2
No. of Strings per MPP Tracker	1					
<b>Battery</b>						
Battery Type	Li-ion / Lead-acid					
Battery Voltage Range	40~60 V					
Max. Charge / Discharge Current	75 A	75 A	100 A	100 A	125 A	125 A
Rated Power	3000 W	3680 W	4000 W	4600 W	5000 W	6000 W
Communication Interface	CAN, RS485					
Compatible Li-ion Battery Brand	Sunwoda, Pylontech, ACSUHO, CESC					
<b>AC Input and Output (On Grid)</b>						
Rated Output Power	3000 W	3680 W	4000 W	4600 W	5000 W	6000 W
Max. Output Apparent Power	3300 VA	4048 VA	4400 VA	5060 VA	5500 VA	6600 VA
Max. Input Apparent Power	6000 VA	7300 VA	8000 VA	9200 VA	10000 VA	10000 VA
Rated Grid Voltage	L / N / PE, 220 / 230 / 240 V					
Rated Grid Frequency	50 Hz / 60 Hz					
Max. Output Current	15 A	18.4 A **	20 A	23 A	25 A	30 A
Max. Input Current	27.3 A	33.2 A	36.4 A	41.9 A	45.5 A	45.5 A
Power Factor	~1(Adjustable from 0.8 leading to 0.8 lagging)					
Total Harmonic Distortion, THDi	<3%					
<b>Backup Output (Off Grid)</b>						
Rated Output Power	3000 W	3680 W	4000 W	4600 W	5000 W	6000 W
Peak Output Apparent Power, 10s	6000 VA	7300 VA	8000 VA	9200 VA	10000 VA	10000 VA
Switch Time	< 10 ms					
Rated Grid Voltage	L / N / PE, 220 / 230 / 240 V					
Rated Grid Frequency	50 Hz / 60 Hz					
Max. Output Current	15 A	16.8 A	20 A	22.8 A	25 A	30 A
Total Harmonic Distortion, THDv	< 3% (Linear load)					
<b>Efficiency</b>						
Max. Efficiency	98.0%					
Euro Weighted Efficiency	97.1%	97.1%	97.1%	97.1%	97.1%	97.1%
Max. Battery Discharge Efficiency	94.7%	94.7%	94.7%	94.7%	94.7%	94.7%
<b>Standard Compliance</b>						
Grid Regulation	EN 50549-10, VDE -AR-N 4105, G98, G99, CEI0 -21					
Safety Regulation	IEC/EN 62109-1, IEC/EN 62109-2					
EMC	IEC/EN 61000-6-1, IEC/EN 61000-6-3					
<b>General Data</b>						
Dimensions (W x H x D)	482 x 461 x 208 mm					
Weight	27 kg					
Installation	Wall- mounted					
Operation Temperature	-25 °C- +60 °C (> 45 °C Derating)					
Operation Humidity	0-95% RH, No Condensing					
Protection Degree	IP66					
Max. Operating Altitude	4000 m (> 2000 m derating)					
Cooling Method	Natural Convection					
Noise Emission	<40 dB					
Topology	High frequency isolation (for battery)					
Display	LED Indicators; Integrated Wi-Fi/4G+APP					
Signal Input and Output	DRM, 1×DI, 2×DO					
StandBy Consumption	<5 W					