



Three Phase LV SERIES Hybrid Inverter

5kW

6kW

8kW

10kW

12kW

15kW



High Performance

- 200% PV oversizing and up to 110% AC output
- 200% peak EPS power for 10s
- Max. 280A charging / discharging current
- 160V low start-up voltage for longer operation



Assured Reliability

- Battery terminal temperature detection
- IP65 protection degree
- Type II SPD on AC & DC side
- Optional AFCI protection



Smart Management

- Smart loads management
- Single unit UPS-level switchover time < 6ms



Flexible Adaptability

- Max. 10pcs parallel for on-grid and off-grid
- Generator function for versatile operations
- Max. 30A input per string, optimized for high-power solar panels

Hybrid Solar Inverter

	HI-3P5K-LV	HI-3P6K-LV	HI-3P8K-LV	HI-3P10K-LV	HI-3P12K-LV	HI-3P15K-LV ^{*1}
PV Input						
Max. PV Access Power	10000 W	12000 W	16000 W	20000 W	24000 W	30000 W
Max. PV Input power	8000 W	9600 W	12800 W	16000 W	19200 W	24000 ^{*2} W
Max. input voltage	800 V					
Rated voltage	360 V					
Start-up voltage	160 V					
MPPT voltage range	200 - 700 V					
Max. input current	17 A + 17 A			30 A + 30 A		
Max. short circuit current	20 A + 20 A			36 A + 36 A		
Number of MPPT Trackers	2					
Number of Strings per MPPT	1 + 1			2 + 2		
AC Input / Output						
Rated AC Input/output Active Power	5000 W	6000 W	8000 W	10000 W	12000 W	15000 W
Max. AC Input/output Apparent Power	5500 VA	6600 VA	8800 VA	11000 VA	13200 VA	16500 VA
Rated AC Input Current	7.6 A	9.1 A	12.1 A	15.2 A	18.2 A	22.8 A
Rated AC Output Current	7.2 A	8.7 A	11.6 A	14.5 A	17.4 A	21.8 A
Max. AC Input Current	8.4 A	10 A	13.4 A	16.7 A	20 A	25 A
Max. AC Output Current	8 A	9.6 A	12.8 A	15.9 A	19.2 A	24 A
Max. Continuous AC Passthrough	30 A (grid to load)			50 A (grid to load)		
Peak Power (off-grid) 10s	10000 W	12000 W	16000 W	20000 W	24000 W	24000 W
Power Factor Range	0.8 leading to 0.8 lagging					
Rated AC voltage Range	220 / 380 V, 230 / 400 V, 0.85 Un - 1.1 Un					
Rated Grid Frequency	50 Hz / 45Hz ~ 55Hz , 60 Hz / 55 Hz ~ 65 Hz					
Grid Connection Form	3L + N + PE					
Switch Time	< 6 ms					
THDi	< 3% (of nominal power)					
DC Injection Current	< 0.5% In					
Battery						
Battery type	Lead-acid or Lithium-ion					
Voltage range	40 - 60 V					
Max. charge/discharge current	120 A	150 A	200 A	220 A	250 A	280 A
Charging Strategy for Lead-Acid battery	3 stages curve					
Charging Strategy for Li-ion Battery	Self-adaption to BMS					
Communication	CAN, RS485					
Efficiency						
Max. Efficiency	97.60%					
Euro Efficiency	96.50%					
MPPT Efficiency	> 99%					
Interface						
Communication Interface	RS485 / RS232 / CAN					
Monitor Mode	WIFI					
General Data						
Operating Temperature	-25 to + 60 ℃ , > 45 ℃ Derating					
Permissible Ambient Humidity	5% to 95%					
Permissible Altitude	< 3000 m					
Noise	≤ 55 dB					
Ingress Protection(IP) Rating	IP 65					
Inverter Topology	Non-isolated					
Over Voltage Category	OVC II (DC), OVC III (AC)					
Surge	TYPE II (DC), TYPE II (AC)					
Cabinet Size (WxHxD)	422 mm × 658 mm × 254 mm (Excluding Connectors and Brackets)					
Weight	≤ 45 kg					
Type of Cooling	Intelligent Air Cooling					
Warranty	5 Years					
Grid Regulation	IEC61727, IEC62116,					
Safety Standard	IEC / EN 62109-1, IEC / EN 62109-2					
EMC Standard	IEC / EN 61000-6-1/2					

*1: 2025 Q3 released , *2: Guarantee 22.5kW and target 24kW