Hybrid Inverter

Three-phase HI-3P(5K-15K)-LV

High Performance

- 200% PV oversizing and up to 110% AC output
- 200% peak EPS power for 10s
- Max. 290A 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

MODEL	HI-3P5K-LV	HI-3P6K-LV	HI-3P8K-LV	HI-3P10K-LV	HI-3P12K-LV	HI-3P15K-LV
STANDARDS						
Grid Regulation	IEC61727, IEC62116, EN50549-1/-10					
Safety	IEC / EN 62109-1, IEC / EN 62109-2					
EMC	IEC / EN 61000-6-1/2					

Application scenarios

House · Farm · Telecom · Countryside · Island · Pasture

MODEL	HI-3P5K-LV	HI-3P6K-LV	HI-3P8K-LV	HI-3P10K-LV	HI-3P12K-LV	HI-3P15K-LV
PV INPUT						
Max. PV Array Power	10000W	12000W	16000W	20000W	24000W	30000W
Max. PV Input Power	8000W	9600W	12800W	16000W	19200W	24000W
Max. input voltage	800V					
Rated Voltage	550V					
Start-up Voltage	160V					
MPPT voltage range	200V - 700V					
Max. input current	17 + 17A			30 + 30A		
Max. short circuit current	20 + 20A			36 + 36A		
No.of MPPT/No.of String Per MPPT	2/1+1			2/2+2		
AC INPUT / OUTPUT						
Rated AC Input/output Active Power	5000W	6000W	8000W	10000W	12000W	15000W
Max. AC Input/output Apparent Power	5500VA	6600VA	8800VA	11000VA	13200VA	16500VA
Rated AC Input Current	7.6A	9.1A	12.1A	15.2A	18.2A	22.8A
Rated AC Output Current	7.2A	8.7A	11.6A	14.5A	17.4A	21.8A
Max. AC Input Current	8.4A	10A	13.4A	16.7A	20A	25A
Max. AC Output Current	8A	9.6A	12.8A	15.9A	19.2A	24A
Max. Continuous AC Passthrough	30 A (grid to load)			50 A (grid to load)		
Peak Power (off-grid) 10s	10000W	12000W	16000W	20000W	24000W	24000W
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 / 45 Hz ~ 55 Hz, 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	120A	150A	200A	220A	250A	290A
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						
Operating Temperature Range	RS485 / CAN					
Storage temperature	WIFI					
GENERAL DATA						
Operating Temperature	-25 to + 60℃, > 45℃ Derating					
Permissible Ambient Humidity	5% to 95%					
Permissible Altitude	< 3000 m					
Noise	≤ 55dB					
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					
Weight	≤ 45 kg					
Type of Cooling	Intelligent Air Cooling					
Warranty	5 Years					