

Residential Series

INVERGY
UPGRADING POWER FOR BETTER FUTURE

Three Phase Hybrid Inverter (LV)

INV (EU)-5KW/6KW/8KW/10KW-48V

INV (EU)-12KW/15KW/20KW-48V



- 100 100% Unbalanced output, each phase: Max. output up to 50% rated power
- 10 Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 350 Max. charging/discharging current of 350A
- 6 6 time periods for battery charging/discharging
- Auto DG synchronisation



Images may differ from the actual product

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Model	INV 5K-3P(LV)	INV 6K-3P(LV)	INV 8K-3P(LV)	INV 10K-3P(LV)	INV 12K-3P(LV)	INV 15K-3P(LV)	INV 20K-3P(LV)
Battery Input Data							
Battery Type	Lead-acid or Lithium-ion						
Battery Voltage Range (V)	40-60						
Max. Charging Current (A)	120	135	190	210	240	280	350
Max. Discharging Current (A)	120	135	190	210	240	280	350
Charging Strategy for Li-ion Battery	Self-adaptation to BMS						
Number of Battery Input	1						
PV String Input Data							
Max. PV Access Power (W)	10000	12000	16000	20000	24000	30000	40000
Max. PV Input Power (W)	7500	9000	12000	15000	18000	24000	32000
Max. PV Input Voltage (V)	800			800			
Start-up Voltage (V)	160			160			
MPPT Voltage Range (V)	200-650			160-650			
Rated PV Input Voltage (V)	550			550			
Max. Operating PV Input Current (A)	20+20			36+36			
Max. Input Short-Circuit Current (A)	30+30			54+54			
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			2/2+2			
AC Input/Output Data							
Rated AC Input/Output Active Power (W)	5000	6000	8000	10000	12000	15000	20000
Max. AC Input/Output Apparent Power (VA)	5500	6600	8800	11000	13200	16500	22000
Rated AC Input/Output Current (A)	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4	22.8/21.8	30.4/29
Max. AC Input/Output Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/16	20/19.2	25/24	33.4/31.9
Max. Continuous AC Passthrough (grid to load) (A)	45			70			
Peak Power (off-grid) (W)	2 times of rated power, 10s						
Power Factor Adjustment Range	0.8 leading to 0.8 lagging						
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un						
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65 Hz						
Grid Connection Form	3L+N+PE						
Total Current Harmonic Distortion THDi	<3% (of nominal power)						
DC Injection Current	<0.5% In						
Efficiency							
Max. Efficiency	97.60%						
Euro Efficiency	97.00%						
MPPT Efficiency	>99%						
Equipment Protection							
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level						
Surge Protection Level	TYPE II(DC), TYPE II(AC)						
Interface							
Communication Interface	RS485/RS232/CAN						
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)						
General Data							
Operating Temperature Range (°C)	-40 TO 60, >45°C Derating						
Permissible Ambient Humidity	0-100%						
Permissible Altitude	3000m						
Noise (dB)	≤55			≤30			
Ingress Protection(IP) Rating	IP 65						
Inverter Topology	Non-Isolated						
Over Voltage Category Cabinet	OVC II(DC), OVC III(AC)						
Size (WxHxD mm)	386×660×250 (Excluding Connectors and Brackets)						
Weight (kg)	35.2			50.6			
Type of Cooling	Intelligent Air Cooling						
Warranty	5Years The Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy						
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105						
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, BIS						