

Evolution

EVO INV-3/3.6/5/6/8K-LP1-ZA

Single-phase Low-Voltage Energy Storage Inverter-ZA



Various methods to access the diesel generator, the generator can be controlled automatically start and stop



UPS level on/off grid switching



Up to 10 sec output at 2x rated power



Support single-phase or three-phase parallel connection, with capacity to construct a maximum system of up to 36KW



Charge and discharge current up to 190A



Up to 6 time slots charge/discharge



Support LFP and SLA batteries, with integrated battery management and protection functions



Support "Peak Shaving" function in both self-consumption and generator mode

Specification Table

EVO INV-3/3.6/5/6/8K-LP1-ZA

Model	3K	3.6K	5K	6K	8K
DC input (photovoltaic side)					
Maximum input power	4.8kW	5.76kW	8kW	9.6kW	12.8kW
Maximum input voltage			600V		
Rated input voltage			330V		
Starting voltage			90V		
MPPT voltage range			90-520V		
Maximum input current			16A/16A		32A/20A
Maximum input short-circuit current			24A/24A		36A/30A
Number of MPPTs/maximum number of input strings			2/2		2/3
Battery					
Battery type	Lithium battery/lead-acid battery				
Battery voltage range	40-60V				
Maximum charging/discharging power	3kW	3.6kW	5kW	6kW	8kW
Maximum charging/discharging current	70A	80A	112A	135A	190A
Communication method	CAN/RS485				
AC output (grid side)					
Rated output power	3kW	3.6kW	5kW	6kW	8kW
Maximum output apparent power	3.3kVA	4kVA	5.5kVA	6.6kVA	8.8kVA
Rated grid voltage	1/N/PE, 220V/230V				
Rated grid frequency	50Hz/60Hz				
Rated grid output current	13.6A/13.0A	16.4A/15.7A	22.7A/21.7A	27.3A/26.1A	36.4A/34.8A
Maximum output current	15A	20A	25A	30A	40A
Output power factor	>0.99 (0.8 Leading... 0.8 lagging)				
Total current harmonic distortion rate	<2%				
AC input (grid side)					
Input voltage range	187-253V				
Maximum input current	20A	25A	32A	40A	20A
Frequency range	45-55Hz/55-65Hz				
AC output (off grid side)					
Rated output power	3kW	3.6kW	5kW	6kW	8kW
Maximum output apparent power	Support 10s continuous output 2 times rated power				
Switth time	<4 ms				
Rated output voltage	1/N/PE, 220V/230V				
Rated frequency	50Hz/60Hz				
Rated output current	13.6A/13.0A	16.4A/15.7A	22.7A/21.7A	27.3A/26.1A	36.4A/34.8A
Maximum output current	15A	20A	25A	30A	40A
Total voltage harmonic distortion rate	<2%				
Efficiency					
Maximum efficiency	>97.5%				
European efficiency	>96.2%				
Protect					
Ground fault detection	Available				
Integrated AFCI (DC Arc fault protection)	Optional				
DC reverse connection protection	Available				
Protection level/overvoltage type	I/II				
Basic parameters					
Dimensions (Width * Height * Depth)	406*560*205 mm				406*560*215 mm
Weight	24kg				27kg
Topology	High frequency isolation (battery)				
Working environment temperature	-40 ~ +60°C				
Protection level	IP66				
Cooling method	Natural cooling				Intelligent air-cooled
Maximum working altitude	4000m				
Grid standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA				
Safety regulations/EMC standards	IEC/EN 62109-1/-2, EN 61000-6-2/-3				
Characteristic					
DC port	MC4 Connectors (PV Port) / Terminal (Battery port)				
AC port	Terminal				
Display screen	LED+APP				
Communication method	RS485 / CAN / Wi-Fi (Optional) / GPRS (Optional) / LAN (Optional)				