

Evolution

EVO INV-3/3.6/4.6/5/6K-LP1

Single-phase Low-voltage Energy Storage Inverter



Multipul MPPT design,
for different roof orientations



Up to 125A/6kW charge
and discharge rate



UPS level
on/off grid switching



Support 'Peak Shaving'
mode



Comes with cables for
battery and meter



Support
parallel connections



Superior
adaptability



Integrate battery management
and protection features to
extend battery lifespan

Specification Table

EVO INV-3/3.6/4.6/5/6K-LP1

Model	3K	3.6K	4.6K	5K	6K
DC IN					
Maximum input power	4.8kW	5.7kW	7kW	8kW	9.6kW
Maximum input voltage			600V		
Rated input voltage			330V		
Starting voltage			90V		
MPPT voltage range			90-520V		
Maximum input current			16A/16A		
Maximum input short-circuit current			24A/24A		
Number of MPPTs/maximum number of input strings			2/2		
Battery					
Battery type	Lithium battery/lead-acid battery				
Battery voltage range	42 - 58V				
Battery capacity	50 - 2000Ah				
Maximum charging/discharging power	3kW	3.6kW	4.6kW	5kW	6kW
Maximum charging/discharging current	62.5A	75A	100A	105A	125A
Communication method	CAN				
AC output (grid side)					
Rated output power	3kW	3.6kW	4.6kW	5kW	6kW
Maximum output apparent power	3.3kVA	4kVA	4.6kVA	5.5kVA	6.6kVA
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	20.9A/20A	22.7A/21.7A	27.3A/26.1A
Maximum output current	15A	18.2A	21A	25A	30A
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	20.5A	24.6A	31.4A	34.1A	40A
Frequency range	45-55Hz/55-65Hz				
AC output (off grid side)					
Rated output power	3kW	3.6kW	4.6kW	5kW	6kW
Maximum output apparent power	4.2kVA, 60sec	5kVA, 60sec	6.4kVA, 60sec	7kVA, 60sec	8kVA, 60sec
Switch time	<10ms				
Rated output voltage	1/N/PE, 220V/230V				
Rated frequency	50Hz/60Hz				
Maximum output current	21.8A	26.2A	33.4A	36.5A	40A
Total voltage harmonic distortion rate	<2%				
Efficiency					
Maximum efficiency	>97.0%		>97.5%		
European efficiency			>96.2%		
PV maximum charging efficiency			> 94.9%		
Maximum charging and discharging efficiency of battery			> 94.33%/93.51%		
Protect					
Ground fault detection			Available		
Residual current 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)	405*480*205 mm				
Weight	24.2kg				
Topology	High frequency isolation (battery)				
Working environment temperature	-25 ~ +60°C				
Protection level	IP66				
Cooling method	Natural cooling				
Maximum working altitude	4000m				
Grid standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA				
Safety regulations/EMC standards	IEC/EN 62109-1/-2, EN 61000-6-1/-2/-3/-4				
Characteristic					
DC port	MC4 Connectors				
AC port	Fast connector				
Display screen	LED+APP				
Communication method	RS485 / CAN / Wi-Fi (Optional) / GPRS (Optional) / LAN (Optional)				