

EV320KW

String PV Inverter



Efficient

- 12 MPPTs, max. inverter efficiency 99.02%
- 45A per MPPT, compatible with 600W+ PV module
- No derating up to 40°C, max. operating altitude 5000m



Friendly

- Fast power response, reactive power response time <30ms
- SCR>1.0 stable operation in extremely weak grid
- Continuous low/high voltage ride through



Intelligent

- Intelligent DC switch, automatically cut off the fault
- Smart IV curve diagnosis, active O&M
- Q at night function, save investment cost



Reliable

- IP66 protection degree, C5 anti-corrosion degree
- DC arc alarm function, higher system reliability
- 24h real-time AC and DC insulation monitoring

Technical Parameters

Type designation	EV320KW
Input(DC)	
Max. PV input voltage	1500V
Nominal PV input voltage	1080V
Start-up input voltage	500V
MPPT voltage range	500V~1500V
Number of MPPT	12
Max. Number of input connector per MPPT	2/3
Max. PV input current	12*45A
Max. DC short-circuit current per MPPT	60A

Technical Parameters

Type designation	EV320KW
Output(AC)	
AC output power	352kVA@30°C / 320kVA@40°C
Max. AC output current	254A
Nominal AC voltage	3/PE, 800V
AC voltage range	650V ~ 880V
Nominal grid frequency / Grid frequency range	50Hz / 45~55Hz, 60Hz / 55~65Hz
Power factor	>0.99@Pn
Power factor range	0.8 leading ~ 0.8 lagging
Harmonic(THDi)	<1%@Pn
Efficiency	
Inverter max. efficiency	99.02%
Inverter European efficiency	98.73%
Protection & Function	
Island protection	Yes
Surge protection	DC Type II / AC Type II
DC reverse connection protection	Yes
DC switch	Yes
AC overcurrent protection	Yes
LVRT/HVRT	Yes
Intelligent string detection	Yes
DC arcing detection	Yes
Anti-PID/PID recovery	Yes/Optional
Q at night function	Optional
General parameters	
Dimensions (W×D×H)*	1115×383×852mm
Weight (with hangers)*	≤120kg
Isolation method	Transformerless
Protection degree	IP66
Power consumption at night	<5W
Cooling method	Intelligent air cooling
Max. operating altitude	5000m (>4000m derating)
Operating ambient temperature range	-30°C ~ 60°C
Allowable relative humidity range	0 ~ 100%
Display	LED, Bluetooth+APP
Communication	RS485/PLC/Wireless
DC connection type	MC4 terminal
AC connection type	OT/DT terminal (max. 400mm ² , support aluminum wire access)
Compliance	IEC 62109-1/-2, IEC 61000-6-2/-4, IEC 61727, IEC 62116, IEC 60068, IEC 61683, EN 50530, EN 50549, NB/T 32004-2018, GB/T 37408-2019

*Note: Actual dimension and weight are subject to delivery.