

All-in-one Machine

# F-ES102

Single Phase High Voltage



All In One

HOT

## Features



High performance

- 200% PV Over management
- 200% backup overload capacity
- Max. efficiency 97.3%, battery efficiency 97%



High reliability

- UPS level redundant protection
- Three-level firmware and two-level hardware battery protection
- Multiple temperature monitoring, delicate thermal management



High intelligence

- Internal EMS optimize home energy supply automatically
- PV production forecast
- Build-in electric power service, FCAS, VPP, ect
- Online monitoring, online diagnosis, online service

## Technical Data

Model	F-ES102-5.0
<b>DC Input</b>	
Max. PV Input Power [W]	10000
Max. PV Input Voltage [V]	580
Max. PV Input Current [A]	15/15
Max. Short-circuit Current per MPPT [A]	18.75/18.75
MPPT Voltage Range [V]	100-550
No. of MPPT Trackers	2
No. of Input Strings per Tracker	1/1
Back-feed Current [A]	0
<b>AC Input</b>	
Rated AC Input Power [W]	5000
Max. AC Input Power [W]	5000
Rated AC Voltage [V]	230
Grid Frequency Range [Hz]	50/60
<b>AC Output</b>	
Rated Grid Output Voltage [V]	230
Rated Output Frequency [Hz]	45-55/55-65
Rated Output Power [W]	5000
Max. Apprent Power [W]	5000
Max. Output Current [A]	21.7
Max. Current per Phase [A]	21.7
Norminal Frequency/Frequency Range [Hz]	50/60
THD	<3%
Power factor	0.8 leading-0.8 lagging
<b>Battery Data</b>	
Battery Type	LiFePO4
Nominal Battery Capacity [kWh]	10.1
Usable Battery Capacity [kWh]	9.6
Nominal Battery Voltage [V]	96
Operation Voltage Range [V]	90-108
Cycle lifetime	8000
Max. Charging/Discharging Current [A]	52.5/52.5
<b>General Information</b>	
Max. Efficiency	97.30 %
Communication	CAN/RS485(Optional)
Ingress Protection Rating	IP65
Cooling Mode	Nature Convection
Noise [dB]	<30
Operation Temperature Range [°C]	-10~50
Operation Altitude [m]	≤4000
Relative Humidity	0-95%(Without Condensing)
Warranty [years]	5 /10 (Optional)
Weight [kg]	Inverter: 19.5/Battery: 90/Inverter:590×405×205
Dimentions (W*H*D) [mm]	Battery:590×750×205
Certifications	VDE 4105-AR-N, VDE 0126-1-1, IEC 62109-1&-2, IEC 62477, IEC 62619, IEC 62040, UN 38.3 EN 61000-6-1&-2&-3&-4