

GOODWE

ESA Series

5kW / 10.8kWh | Single Phase
LV Home Storage Solution
(Inverter + Battery)

GoodWe ESA Series is an all-in-one solar and storage solution which integrates the inverter, battery charger, UPS and battery enclosure into a pre-wired modular system for easier and faster installation. The compact, elegantly designed and robust unit is IP65 rated so it can be mounted either inside or outside withstanding all weather conditions. Reduction of installation time of up to 50%.



Integrated isolators



Pre-wired



Inbuilt 4.6kVA UPS



5kW AC Output



10.8kWh battery capacity



100A battery current

Technical Data GW5048-ESA

Battery Module Data	
Battery Type	Li-Ion
Battery Module Nominal Capacity (KWh)	5.4
Battery Module Weight (Kg)	49
Size (Width × Height × Depth mm)	400 × 484.2 × 226.2
Cycle Life (25°C)	>3500
Maximum Number of Battery Connections	2
Maximum Total Battery Capacity (KWh)	10.8

Battery Enclosure Data	
Weight (Kg)	37
Size (Width × Height × Depth mm)	516 × 1205 × 280
Mounting	Wall Bracket
Protection Degree	IP54

Inverter Data

Battery Input Data	
Nominal Battery Voltage (V)	48
Battery Voltage Range (V)	40~60
Maximum Charging Power (W)	4600
Maximum Discharging Power (W)	4600
Maximum Charging Current (A)	90
Maximum Discharging Current (A)	100
Battery Charging Method	Self-adaption to BMS
Battery Disconnect	Integrated 2 pole DC breaker 125A DC per pole

PV String Input Data	
Max. DC Input Power (W)	6500
Max. DC Input Voltage (V)	580
MPPT Range (V)	125~550
Start-up Voltage (V)	125
Min. Feed-in Voltage (V)*1	150
MPPT Range for Full Load (V)	215~500
Nominal DC Input Voltage (V)	360
Max. Input Current (A)	11 / 11
Max. Short Current (A)	13.8 / 13.8
Number of MPPTs	2
Number of Strings per MPPT	1
Solar Array Switch	Integrated

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AC Output Data (On-grid)	Protection
Max. Apparent Power Output to Utility Grid (VA)*2	4600 / 5100
Max. Apparent Power from Utility Grid (VA)	9200
Nominal Output Voltage (V)	230
Nominal Output Frequency (Hz)	50 / 60
Max. AC Current Output to Utility Grid (A)	22.8
Max. AC Current From Utility Grid (A)	40
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)
Output THDi (@Nominal Output)	<3%
Grid disconnect	Integrated 2 pole 40A MCB
	Anti-islanding Protection
	PV String Input Reverse Polarity Protection
	Insulation Resistor Detection
	Residual Current Monitoring Unit
	Output Over Current Protection
	Output Short Protection
	Output Over Voltage Protection

AC Output Data (Back-up)	General Data
Nominal Output Apparent Power (VA)	4600
Nominal Output Current (A)	20
Peak Output Apparent Power (VA)*3	6900 (10 seconds maximum)
Nominal Output Voltage (V)	230 (±2%)
Nominal Output Frequency (Hz)	50/60 (±0.2%)
Output THDv (@Linear Load)	<3%
Back-up Loads AC Disconnect	Integrated 2 pole 25A MCB
Manual Back-up Load AC Bypass Switch	Integrated
	Operating Temperature Range (°C)
	Relative Humidity
	Operating Altitude (m)
	Cooling
	Noise (dB)
	User Interface
	Communication with BMS
	Communication with Meter
	Communication with Portal
	Weight (Kg)
	Size (Width × Height × Depth mm)
	Mounting
	Protection Degree
	Standby Self-Consumption (W)
	Topology

*1: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.

*2: 4600VA for VDE-AR-N4105,5100VA for other country.

*3: Can be reached only if PV and battery power is enough.

*: Please visit GoodWe website for the latest certificates.