

ESA Series

All-In-One Single Phase Storage Solution

Technical Data	GW5048-ESA
Battery Module Data	
Battery Type	Li-Ion
Battery Module Nominal Capacity(KWh)	2.4
Battery Module Weight(Kg)	24
Size (Width*Height*Depth mm)	440 x 410 x 88.5mm
Cycle Life(25°C)	>6000
Maximum Number of Battery Connections	4
Maximum Total Battery Capacity (KWh)	9.6
Battery Enclosure Data	
Weight (kg)	37
Size (Width*Height*Depth mm)	516 x 1205 x 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)	85
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)	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
No. of MPP Trackers	2
No. of Strings per MPP Tracker	1
Solar Array Switch	Integrated



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AC Output Data (On-grid)		Insulation Resistor Detection	Integrated
Max. Apparent Power Output to Utility Grid (VA)*	4600/5100	Residual Current Monitoring Unit	Integrated
Max. Apparent Power from Utility Grid (VA)	9200	Output Over Current Protection	Integrated
Nominal Output Voltage (V)	230	Output Short Protection	Integrated
Nominal Output Frequency (Hz)	50/60	Output Over Voltage Protection	Integrated
Max. AC Current Output to Utility Grid (A)	22.8	General Data	
Max. AC Current From Utility Grid (A)	40	Operating Temperature Range (°C)	-25~60
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	Relative Humidity	0~95%
Output THDi (@Nominal Output)	<3%	Operating Altitude (m)	3000
Grid disconnect	Integrated 2 pole 40A MCB	Cooling	Nature Convection
AC Output Data (Back-up)		Noise (dB)	<25
Nominal Output Apparent Power (VA)	4600	User Interface	LED & APP
Nominal Output Current (A)	20	Communication with BMS	CAN
Peak Output Apparent Power (VA)**	6900 (10 seconds maximum)	Communication with Meter	RS485
Nominal Output Voltage (V)	230 (±2%)	Communication with Portal	Wi-Fi
Nominal Output Frequency (Hz)	50/60 (±0.2%)	Weight (kg)	44
Output THDv (@Linear Load)	<3%	Size (Width*Height*Depth mm)	516 X 832 X 290
Back-up Loads AC Disconnect	Integrated 2 pole 25A MCB	Mounting	Wall Bracket
Manual Back-up Load AC Bypass Switch	Integrated	Protection Degree	IP65
Efficiency		Standby Self-Consumption (W)	<13
Max. Efficiency	97.6%	Topology	Battery High Frequency Isolation/Solar Transformerless
European Averaged Efficiency	97.0%	Certifications & Standards	
Max. Battery to Load Efficiency	94.0%	Grid Regulation	CEI 0-21;VDE4105-AR-N
Protection		Safety Regulation	IEC/EN62109-1&2, IEC62040-1
Anti-islanding Protection	Integrated	EMC	EN61000-6-4, EN 61000-4-16, EN 61000-4-18, EN 61000-4-29
PV String Input Reverse Polarity Protection	Integrated		

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

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