

Table of Contents

INDEX

06 SERIES

01

Air-Cooled Battery Cabinets

GS HV / HVA Series · 30–265 kWh

P. 04–08

02

Liquid-Cooled Battery Cabinets

GS HVL Series · 193–261 kWh

P. 10–11

03

Integrated Solar+Storage System

ESS HV / HVL / HPL Series · 15–522 kWh

P. 13–20

04

District Energy Storage

GTA / GTL Series · 31–261 kWh

P. 22–27

05

UPS Backup Power Supply

ESS GU Series · 5–108 kWh

P. 29–33

06

PV+ESS+Charger All-in-One

PEC Series · 60–250 kW · EV Charging

P. 34–35

GS Series Battery Cabinets

C&I Battery Energy Storage · LiFePO₄

Commercial-grade LiFePO₄ battery cabinets with intelligent air-cooling. From 30 kWh to 265 kWh — built for behind-the-meter, microgrid and light-industrial sites. Modular architecture, IP20/IP54, full BMS.

30–265

CAPACITY (KWH)

307–845

BATTERY RANGE (VDC)

Air

COOLING METHOD

IP20/54

PROTECTION



GS HV Series

RACK-MOUNTED CABINET

30 kWh · 40 kWh · 50 kWh

LiFePO4
Premium LFP cells

Slim Tower Design



GS HV · 30-50 KWH

Technical Specifications

SPECIFICATIONS

3 Models

Model	GS HV 30	GS HV 40	GS HV 50
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P16S	1P16S	1P16S
Number of Modules	6	8	10
ELECTRICAL PERFORMANCE			
Battery Voltage	307.2 VDC	409.6 VDC	512 VDC
Single Cell Capacity	102 Ah	102 Ah	102 Ah
Battery Level	31 kWh	41 kWh	52 kWh
Voltage Range	278.4–345.6 VDC	371.2–460.8 VDC	464–576 VDC
Max Charge Current	51 A	51 A	51 A
Max Discharge Current	51 A	51 A	51 A
PROTECTION & SYSTEM			
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature		
Cooling Method	Air Cooling (Smart Fan)		
Communication	CAN / RS485		
ENVIRONMENT & PHYSICAL			
Operating Temperature	–10°C ~ +55°C (Discharge: –20°C ~ +55°C)		
Storage Temperature	0°C ~ 30°C		

GS HVA Series

RACK-MOUNTED CABINET

60 kWh · 80 kWh · 95 kWh · 105 kWh

LiFePO4
Premium LFP cells

Stackable Modules



GS HVA · 60-105 KWH

Technical Specifications

SPECIFICATIONS

4 Models

Model	GS HVA 60	GS HVA 80	GS HVA 95	GS HVA 105
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P16S	1P16S	1P16S	1P16S
Number of Modules	6	8	9	10

ELECTRICAL PERFORMANCE

Battery Voltage	307.2 VDC	409.6 VDC	460.8 VDC	512 VDC
Single Cell Capacity	206 Ah	206 Ah	206 Ah	206 Ah
Battery Level	63 kWh	84 kWh	95 kWh	105 kWh
Voltage Range	278.4-345.6 VDC	371.2-460.8 VDC	417.6-518.4 VDC	464-576 VDC
Max Charge Current	103 A	103 A	103 A	103 A
Max Discharge Current	103 A	103 A	103 A	103 A

PROTECTION & SYSTEM

Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature
Cooling Method	Air Cooling (Smart Fan)
Communication	CAN / RS485

ENVIRONMENT & PHYSICAL

Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C
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GS HVA Series

OUTDOOR CABINET

112 kWh · 144 kWh · 160 kWh

LiFePO4
Premium LFP cells

Outdoor-Rated



GS HVA · 112-160 KWH

Technical Specifications

SPECIFICATIONS

3 Models

Model	GS HVA 112	GS HVA 144	GS HVA 160
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P16S	1P16S	1P16S
Number of Modules	7	8	9
ELECTRICAL PERFORMANCE			
Battery Voltage	358.4 VDC	409.6 VDC	460.8 VDC
Single Cell Capacity	314 Ah	314 Ah	314 Ah
Battery Level	112 kWh	128 kWh	144 kWh
Voltage Range	324.8–403.2 VDC	371.2–460.8 VDC	417.6–518.4 VDC
Max Charge Current	157 A	157 A	157 A
Max Discharge Current	157 A	157 A	157 A
PROTECTION & SYSTEM			
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature		
Cooling Method	Air Cooling (Smart Fan)		
Communication	CAN / RS485		
ENVIRONMENT & PHYSICAL			
Operating Temperature	Charge 0°C~+55°C · Discharge –20°C~+55°C		
Storage Temperature	0°C ~ 30°C		

GS HVA Series

OUTDOOR CABINET

216 kWh · 241 kWh · 265 kWh

LiFePO4
Premium LFP cells

High-Capacity



GS HVA · 216–265 KWH

Technical Specifications SPECIFICATIONS

3 Models

Model	GS HVA 216	GS HVA 241	GS HVA 265
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P24S	1P24S	1P24S
Number of Modules	9	10	11
ELECTRICAL PERFORMANCE			
Battery Voltage	691.2 VDC	768 VDC	844.8 VDC
Single Cell Capacity	314 Ah	314 Ah	314 Ah
Battery Level	217 kWh	241 kWh	265 kWh
Voltage Range	626.4–777.6 VDC	696–864 VDC	765.6–950.4 VDC
Max Charge Current	157 A	157 A	157 A
Max Discharge Current	157 A	157 A	157 A
PROTECTION & SYSTEM			
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature		
Cooling Method	Air Cooling (Smart Fan)		
Communication	CAN / RS485		
ENVIRONMENT & PHYSICAL			
Operating Temperature	Charge 0°C~+55°C · Discharge –20°C~+55°C		
Storage Temperature	0°C ~ 30°C		

GS HVA Series

OUTDOOR CABINET

209 kWh · 235 kWh · 261 kWh

LiFePO4
Premium LFP cells

Industrial Grade



GS HVA · 209–261 KWH

Technical Specifications

SPECIFICATIONS

3 Models

Model	GS HVA 209	GS HVA 235	GS HVA 261
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P26S	1P26S	1P26S
Number of Modules	8	9	10
ELECTRICAL PERFORMANCE			
Battery Voltage	665.6 VDC	748.8 VDC	832 VDC
Single Cell Capacity	314 Ah	314 Ah	314 Ah
Battery Level	209 kWh	235 kWh	261 kWh
Voltage Range	603.2~748.8 VDC	678.6~842.4 VDC	754~936 VDC
Max Charge Current	157 A	157 A	157 A
Max Discharge Current	157 A	157 A	157 A
PROTECTION & SYSTEM			
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature		
Cooling Method	Air Cooling (Smart Fan)		
Communication	CAN / RS485		
ENVIRONMENT & PHYSICAL			
Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C		
Storage Temperature	0°C ~ 30°C		

GS HVL Series Battery Cabinets

Advanced Liquid Cooling · 193–522 kWh

Precision liquid cooling holds cell temperature within $\pm 2^{\circ}\text{C}$. A-grade LiFePO_4 cells give tighter thermal control, longer cycle life and higher sustained power for demanding industrial duty.

193–522

CAPACITY (KWH)

614–938

BATTERY RANGE (VDC)

Liquid

COOLING METHOD

IP54

PROTECTION



GS HVL Series

CABINET TYPE

193 kWh · 241 kWh · 209 kWh · 261 kWh

Liquid Cooling
Premium LFP cells

Cabinet Type



GS HVL SERIES · 261 KWH

Technical Specifications SPECIFICATIONS

4 Models

Model	193 kWh	241 kWh	209 kWh	261 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P40S	1P48S	1P52S	1P52S
Number of Modules	4	5	4	5

ELECTRICAL PERFORMANCE

Battery Voltage	614.4 VDC	768 VDC	665.6 VDC	832 VDC
Single Cell Capacity	314 Ah	314 Ah	314 Ah	314 Ah
Battery Level	193 kWh	241 kWh	209 kWh	261 kWh
Voltage Range	556.8–691.2 VDC · 696–864 VDC · 603.2–748.8 VDC · 754–936 VDC			
Max Charge Current	157 A	157 A	157 A	157 A
Max Discharge Current	157 A	157 A	157 A	157 A

PROTECTION & SYSTEM

Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature
Cooling Method	Liquid Cooling (Built-in Circuit)
Communication	CAN / RS485

ENVIRONMENT & PHYSICAL

Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C
Storage Temperature	0°C · 20°C · 6 months at 25°C

GS HVL Series

CABINET TYPE

313 kWh · 418 kWh · 522 kWh

Liquid Cooling
Premium LFP cells

Cabinet Type



GS HVL SERIES · 522 KWH

Technical Specifications SPECIFICATIONS

3 Models

Model	313 kWh	418 kWh	522 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P52S	1P52S	1P52S
Number of Modules	6	8	10

ELECTRICAL PERFORMANCE

Battery Voltage	499.2 VDC	665.6 VDC	832 VDC
Single Cell Capacity	314 Ah	314 Ah	314 Ah
Battery Level	313 kWh	418 kWh	522 kWh
Voltage Range	452.4–561.6 VDC · 603.2–748.8 VDC · 754–936 VDC		
Max Charge Current	157 A	157 A	157 A
Max Discharge Current	157 A	157 A	157 A

PROTECTION & SYSTEM

Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature
Cooling Method	Liquid Cooling (Built-in Circuit)
Communication	CAN / RS485

ENVIRONMENT & PHYSICAL

Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C
Storage Temperature	0°C · 20°C · 6 months at 25°C

ESS HV Series Solar+Storage System

PV + ESS + EMS All-in-One · 15–522 kWh

PV inverter, lithium battery and energy management in one cabinet. Built for solar+storage microgrids, district generation and commercial parks. Multi-MPPT up to 950 VDC with seamless <10 ms on/off-grid switching.

15–250

INVERTER (KW)

30–522

STORAGE (KWH)

Air / Liquid

COOLING

IP20/54

PROTECTION



ESS HV Series

INTEGRATED CABINET

15 kW + 30/41 kWh

LiFePO4
Premium LFP cells

Integrated Cabinet



ESS HV SERIES · 15 KW
+ 30/41 KWH

Technical Specifications

SPECIFICATIONS

2 Models

Model	15 kW + 30 kWh	15 kW + 41 kWh
PV PARAMETERS		
Max PV Power	15 kW	
Max. PV Voltage	850 V	
PV Startup Voltage	250 V	
MPPT Voltage Range	200–800 V	
Max PV Current	25 A + 25 A	
AC OUTPUT (GRID)		
Rated Power	15 kVA	
Rated Current	22 A	
Rated Voltage	400 V / 230 V	
Voltage Range	–20% – +15%	
Frequency Range	50 Hz / 60 Hz (47–62 Hz)	
Current Harmonics	< 3%	
Power Factor	–1 – 1	
AC OUTPUT (OFF-GRID)		
Rated Output Power	15 kVA	
Max Output Power	16.5 kVA	

13

ESS HV Series

INTEGRATED CABINET

25 kW + 52 kWh

LiFePO4
Premium LFP cells

Integrated Cabinet



ESS HV SERIES · 25 KW
+ 52 KWH

Technical Specifications

SPECIFICATIONS

1 Models

Model 25 kW + 52 kWh

PV PARAMETERS

Max PV Power	15 kW – 15.2 kW
Max. PV Voltage	850 V
PV Startup Voltage	250 V
MPPT Voltage Range	200–800 V
Max PV Current	25 A + 25 A

AC OUTPUT (GRID)

Rated Power	25 kVA
Rated Current	36.2 A
Rated Voltage	400 V / 230 V
Voltage Range	–20% – +15%
Frequency Range	50 Hz / 60 Hz (47–62 Hz)
Current Harmonics	< 3%
Power Factor	–1 – 1

AC OUTPUT (OFF-GRID)

Rated Output Power	25 kVA
Max Output Power	27.5 kVA

ESS HV Series

INTEGRATED CABINET

30 kW + 63 / 80 kWh

LiFePO4
Premium LFP cells

Integrated Cabinet



ESS HV SERIES · 30 KW
+ 63 / 80 KWH

Technical Specifications

SPECIFICATIONS

2 Models

Model	30 kW + 63 kWh	30 kW + 80 kWh
PV PARAMETERS		
Max PV Power	19.2 kW – 19.2 kW	
Max. PV Voltage	850 V	
PV Startup Voltage	250 V	
MPPT Voltage Range	200–800 V	
Max PV Current	64 A + 64 A	
AC OUTPUT (GRID)		
Rated Power	30 kVA	
Rated Current	43.2 A	
Rated Voltage	400 V / 230 V	
Voltage Range	–20% – +15%	
Frequency Range	50 Hz / 60 Hz (47–62 Hz)	
Current Harmonics	< 3%	
Power Factor	–1 – 1	
AC OUTPUT (OFF-GRID)		
Rated Output Power	30 kVA	
Max Output Power	33 kVA	

ESS HVA Series

INTEGRATED CABINET

50 kW + 105 / 128 kWh

LiFePO4
Premium LFP cells

Integrated Cabinet



ESS HVA SERIES · 50
KW + 105 / 128 KWH

Technical Specifications

SPECIFICATIONS

2 Models

Model	50 kW + 105 kWh	50 kW + 128 kWh
PV PARAMETERS		
Max PV Power	38.4 kW – 19.2 kW	
Max. PV Voltage	850 V	
PV Startup Voltage	250 V	
MPPT Voltage Range	200–800 V	
Max PV Current	64 A + 64 A	
AC OUTPUT (GRID)		
Rated Power	50 kVA	
Rated Current	72.5 A	
Rated Voltage	400 V / 230 V	
Voltage Range	–20% – +15%	
Frequency Range	50 Hz / 60 Hz (47–62 Hz)	
Current Harmonics	< 3%	
Power Factor	–1 – 1	
AC OUTPUT (OFF-GRID)		
Rated Output Power	50 kVA	
Max Output Power	55 kVA	

16

ESS HVA Series

INTEGRATED CABINET

60 kW + 128 / 160 kWh

LiFePO4
Premium LFP cells

Integrated Cabinet



**ESS HVA SERIES · 60
KW + 128 / 160 KWH**

Technical Specifications

SPECIFICATIONS

2 Models

Model	60 kW + 128 kWh	60 kW + 160 kWh
PV PARAMETERS		
Max PV Power	38.4 kW – 19.2 kW	
Max. PV Voltage	850 V	
PV Startup Voltage	250 V	
MPPT Voltage Range	200–800 V	
Max PV Current	64 A + 64 A	
AC OUTPUT (GRID)		
Rated Power	60 kVA	
Rated Current	87 A	
Rated Voltage	400 V / 230 V	
Voltage Range	–20% – +15%	
Frequency Range	50 Hz / 60 Hz (47–62 Hz)	
Current Harmonics	< 3%	
Power Factor	–1 – 1	
AC OUTPUT (OFF-GRID)		
Rated Output Power	60 kVA	
Max Output Power	66 kVA	

17

ESS HVA Series

INTEGRATED CABINET

100 kW + 209 / 216 kWh

LiFePO4
Premium LFP cells

Integrated Cabinet



ESS HVA SERIES · 100
KW + 209 / 216 KWH

Technical Specifications

SPECIFICATIONS

2 Models

Model	100 kW + 209 kWh	100 kW + 216 kWh
PV PARAMETERS		
Max PV Power	200 kW	
Max. PV Voltage	1000 V	
PV Startup Voltage	180 V	
MPPT Voltage Range	150–950 V	
Max PV Current	10 × 42 A	
AC OUTPUT (GRID)		
Rated Power	100 kVA	
Rated Current	151.9 A / 144.3 A	
Rated Voltage	3/N/PE, 220 V / 380 V / 230 V / 400 V	
Voltage Range	–20% – +15%	
Frequency Range	50 Hz / 60 Hz	
Current Harmonics	< 3%	
Power Factor	–1 – 1	
AC OUTPUT (OFF-GRID)		
Rated Output Power	100 kVA	
Max Output Power	110 kVA	

18

ESS HVL Series

INTEGRATED CABINET

125 kW + 241 / 261 kWh

LiFePO4
Premium LFP cells

Integrated Cabinet



ESS HVL SERIES · 125
KW + 241 / 261 KWH

Technical Specifications

SPECIFICATIONS

2 Models

Model	125 kW + 241 kWh	125 kW + 261 kWh
PV PARAMETERS		
Max PV Power	250 kW × 2	
Max. PV Voltage	1000 V	
PV Startup Voltage	180 V	
MPPT Voltage Range	150–950 V	
Max PV Current	10 × 42 A	
AC OUTPUT (GRID)		
Rated Power	125 kW	
Rated Current	200 A / 180.4 A	
Rated Voltage	230/400 V / 3/N/PE, 220 V / 380 V / 230 V / 400 V	
Voltage Range	–15% – +15%	
Frequency Range	50 Hz / 60 Hz	
Current Harmonics	< 3%	
Power Factor	–1 – 1	
AC OUTPUT (OFF-GRID)		
Rated Output Power	125 kW	
Max Output Power	137.5 kVA / 180.4 kVA	

ESS HPL Series

INTEGRATED CABINET

150 / 200 / 250 kW + 313 / 418 / 522 kWh

LiFePO4
Premium LFP cells

Integrated Cabinet



**ESS HPL SERIES · 150 /
200 / 250 KW + 313 / 418
/ 522 KWH**

Technical Specifications

SPECIFICATIONS

3 Models

Model	150 kW + 313 kWh	200 kW + 418 kWh	250 kW + 522 kWh
PV PARAMETERS			
Max PV Power	150 kW × 2 / 200 kW × 2 / 250 kW × 2		
Max. PV Voltage	1000 V		
PV Startup Voltage	180 V		
MPPT Voltage Range	150–950 V		
Max PV Current	2 × 10 × 42 A / 2 × 10 × 42 A / 2 × 10 × 42 A		
AC OUTPUT (GRID)			
Rated Power	75 kW × 2 / 100 kW × 2 / 125 kW × 2		
Rated Current	114 A × 2 / 151.9 A × 2 / 180.4 A × 2		
Rated Voltage	3/N/PE, 220 V / 380 V / 230 V / 400 V		
Voltage Range	–15% – +15%		
Frequency Range	50 Hz / 60 Hz		
Current Harmonics	< 3%		
Power Factor	–1 – 1		
AC OUTPUT (OFF-GRID)			
Rated Output Power	75 kW × 2 / 100 kW × 2 / 200 kW × 2		
Max Output Power	165 kVA / 220 kVA / 220 kVA		

GTA / GTL Series District Energy Storage

LiFePO4 Rack Cabinets · 31–261 kWh

LiFePO4 cabinets for district-level storage. GTA (air-cooled) spans 31–166 kWh, GTL (liquid-cooled) 209–261 kWh. Rack-mountable and ready for peak shaving, valley filling and demand-side management.

31–261

CAPACITY (KWH)

204–832

BATTERY (VDC)

Air / Liquid

COOLING

IP20/54

PROTECTION

GTA Series

RACK-MOUNTED TYPE

31 kWh · 41 kWh · 51 kWh

Air Cooling
Premium LFP cells

Rack-mounted Type



GTA SERIES · 51 KWH

Technical Specifications

SPECIFICATIONS

3 Models

Model	GTA 31 kWh	GTA 41 kWh	GTA 51 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P16S	1P16S	1P16S
Number of Modules	6	8	10
ELECTRICAL PERFORMANCE			
Battery Voltage	307.2 VDC	409.6 VDC	512 VDC
Single Cell Capacity	102 Ah	102 Ah	102 Ah
Battery Level	5 kWh × 6	5 kWh × 8	5 kWh × 10
Voltage Range	278.4–345.6 VDC · 371.2–460.8 VDC · 464–576 VDC		
Max Charge Current	51 A	51 A	51 A
Max Discharge Current	102 A	102 A	102 A
PROTECTION & SYSTEM			
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature		
Cooling Method	Air Cooling (Smart Fan)		
Communication	CAN / RS485		
ENVIRONMENT & PHYSICAL			
Operating Temperature	Charge 0°C~+55°C · Discharge –20°C~+55°C		
Storage Temperature	0°C ~ 20°C · 6 months at 25°C		

GTA Series

RACK-MOUNTED TYPE

64 kWh · 96 kWh · 112 kWh

Air Cooling
Premium LFP cells

Rack-mounted Type



GTA SERIES · 112 KWH

Technical Specifications

SPECIFICATIONS

3 Models

Model	GTA 64 kWh	GTA 96 kWh	GTA 112 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P16S	1P16S	1P16S
Number of Modules	4	6	7
ELECTRICAL PERFORMANCE			
Battery Voltage	204.8 VDC	307.2 VDC	358.4 VDC
Single Cell Capacity	314 Ah	314 Ah	314 Ah
Battery Level	16 kWh × 4	16 kWh × 6	16 kWh × 7
Voltage Range	185.6–230.4 VDC · 278.4–345.6 VDC · 324.8–403.2 VDC		
Max Charge Current	157 A	157 A	157 A
Max Discharge Current	314 A	314 A	314 A
PROTECTION & SYSTEM			
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature		
Cooling Method	Air Cooling (Smart Fan)		
Communication	CAN / RS485		
ENVIRONMENT & PHYSICAL			
Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C		
Storage Temperature	0°C · 20°C · 6 months at 25°C		

GTA / GTL Series

AIR / LIQUID COOLING

128 kWh · 160 kWh · 209 kWh · 261 kWh

Rack Cabinet
Premium LFP cells

Air / Liquid Cooling



GTA / GTL SERIES · 261
KWH

Technical Specifications

SPECIFICATIONS

4 Models

Model	GTA 128 kWh	GTA 160 kWh	GTL 209 kWh	GTL 261 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P16S	1P16S	1P26S	1P26S
Number of Modules	8	10	4	5
ELECTRICAL PERFORMANCE				
Battery Voltage	409.6 VDC	512 VDC	665.6 VDC	832 VDC
Single Cell Capacity	314 Ah	314 Ah	314 Ah	314 Ah
Battery Level	16 kWh × 8	16 kWh × 10	52 kWh × 4	52 kWh × 5
Voltage Range	371.2–460.8 VDC · 464–576 VDC · 603.2–748.8 VDC · 754–936 VDC			
Max Charge Current	157 A	157 A	157 A	157 A
Max Discharge Current	314 A	314 A	314 A	314 A
PROTECTION & SYSTEM				
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature			
Cooling Method	Air Cooling	Air Cooling	Liquid Cooling	Liquid Cooling
Communication	CAN / RS485			
ENVIRONMENT & PHYSICAL				
Operating Temperature	Charge 0°C~+55°C · Discharge −20°C~+55°C			
Storage Temperature	0°C – 30°C · 6 months at 25°C			

24

ESS GTA Series

CABINET TYPE

25 kW+41 kWh · 40 kW+51 kWh · 50 kW+51 kWh · 60 kW+62 kWh

Air Cooling
Premium LFP cells

Cabinet Type



ESS GTA SERIES · 60
KW+62 KWH

Technical Specifications

SPECIFICATIONS

4 Models

Model	25 kW + 41 kWh	40 kW + 51 kWh	50 kW + 51 kWh	60 kW + 62 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P16S	1P16S	1P16S	1P16S
Number of Modules	8	10	10	12

BATTERY PERFORMANCE

Battery Voltage	409.6 VDC	512 VDC	512 VDC	614.4 VDC
Single Cell Capacity	102 Ah	102 Ah	102 Ah	102 Ah
Battery Level	41 kWh	51 kWh	51 kWh	62 kWh
Voltage Range	371.2–460.8 VDC · 464–576 VDC · 464–576 VDC · 556.8–691.2 VDC			
Max Charge Current	51 A	51 A	51 A	157 A
Max Discharge Current	102 A	102 A	102 A	314 A

SYSTEM PERFORMANCE

Rated Power	25 kVA
Rated Current	43.5 A
Rated Voltage	400/230 V
Voltage Range	–20% – +15%
Frequency Range	50 Hz / 60 Hz (47–62 Hz)
Current Harmonics	≤ 3%

ESS GTA Series

OUTDOOR CABINET

80 kW + 112 / 100 + 144 / 125 + 144 / 150 + 160 kWh

Air Cooling
Premium LFP cells

Outdoor Cabinet



ESS GTA SERIES · 80 KW
+ 112 / 100 + 144 / 125 +
144 / 150 + 160 KWH

Technical Specifications SPECIFICATIONS

4 Models

Model	80 kW + 112 kWh	100 kW + 144 kWh	125 kW + 144 kWh	150 kW + 160 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P16S	1P24S	1P24S	1P16S
Number of Modules	7	6	6	10

BATTERY PERFORMANCE

Battery Voltage	358.4 VDC	460.8 VDC	460.8 VDC	512 VDC
Single Cell Capacity	314 Ah	314 Ah	314 Ah	314 Ah
Battery Level	112 kWh	144 kWh	144 kWh	160 kWh
Voltage Range	324.8–403.2 VDC · 417.6–518.4 VDC · 417.6–518.4 VDC · 464–576 VDC			
Max Charge Current	157 A	157 A	157 A	157 A
Max Discharge Current	314 A	314 A	314 A	314 A

SYSTEM PERFORMANCE

Rated Power	80 kVA
Rated Current	116 A
Rated Voltage	400/230 V
Voltage Range	–20% – +15%
Frequency Range	50 Hz / 60 Hz (47–62 Hz)
Current Harmonics	< 3%

ESS GTL Series

OUTDOOR CABINET

200 kW + 209 kWh · 250 kW + 261 kWh

Liquid Cooling
Premium LFP cells

Outdoor Cabinet



ESS GTL SERIES · 250
KW + 261 KWH

Technical Specifications SPECIFICATIONS

2 Models

Model	200 kW + 209 kWh	250 kW + 261 kWh
Cell Chemistry	LiFePO4	LiFePO4
Module Configuration	1P52S	1P52S
Number of Modules	4	5
BATTERY PERFORMANCE		
Battery Voltage	665.6 VDC	832 VDC
Single Cell Capacity	314 Ah	314 Ah
Battery Level	52 kWh × 4	52 kWh × 5
Voltage Range	603.2–748.8 VDC · 754–936 VDC	
Max Charge Current	157 A	157 A
Max Discharge Current	314 A	314 A
SYSTEM PERFORMANCE		
Rated Power	200 kVA	
Rated Current	290 A	
Rated Voltage	400/230 V	
Voltage Range	–20% – +15%	
Frequency Range	50 Hz / 60 Hz (47–62 Hz)	
Current Harmonics	< 3%	

ESS GU Series Backup Power Supply

High-Rate LiFePO4 · 5–108 kWh

Purpose-built for UPS backup, data centres and telecom. High-rate 2C / 4C discharge responds instantly to grid outages. Modular 5–108 kWh cabinets with broad UPS compatibility.

2C / 4C

HIGH RATE

5–108

CAPACITY (KWH)

192–512

BATTERY (VDC)

UPS

COMPATIBLE



ESS GU Series

COMPACT UPS MODULE

5 kWh · 10 kWh · 21 kWh

LiFePO4
Premium LFP cells

Compact UPS Module



ESS GU SERIES · 21
KWH

Technical Specifications

SPECIFICATIONS

3 Models

Model	5 kWh	10 kWh	21 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P20S	1P20S	1P20S
Number of Modules	3	6	6
ELECTRICAL PERFORMANCE			
Battery Voltage	192 VDC	384 VDC	384 VDC
Single Cell Capacity	27 Ah	27 Ah	55 Ah
Battery Level	5.186 kWh	10.37 kWh	21.12 kWh
Voltage Range	174–218 VDC · 348–432 VDC · 348–432 VDC		
Max Charge Current	13.5 A	13.5 A	27.5 A
Max Discharge Current	54 A	54 A	110 A
PROTECTION & SYSTEM			
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature		
Cooling Method	Air Cooling (Smart Fan)		
Communication	CAN / RS485		
ENVIRONMENT & PHYSICAL			
Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C		

29

ESS GU Series

HIGH-RATE UPS MODULE

40 kWh · 54 kWh · 80 kWh · 108 kWh

LiFePO4
Premium LFP cells

High-Rate UPS Module



ESS GU SERIES · 108
KWH

Technical Specifications

SPECIFICATIONS

4 Models

Model	40 kWh	54 kWh	80 kWh	108 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P20S	1P20S	1P20S	1P20S
Number of Modules	6	8	6	8

ELECTRICAL PERFORMANCE

Battery Voltage	384 VDC	512 VDC	384 VDC	512 VDC
Single Cell Capacity	105 Ah	105 Ah	210 Ah	210 Ah
Battery Level	40.32 kWh	53.76 kWh	80.64 kWh	107.52 kWh
Voltage Range	348–432 VDC · 464–570 VDC · 348–432 VDC · 464–570 VDC			
Max Charge Current	52.5 A	52.5 A	105 A	105 A
Max Discharge Current	210 A	210 A	420 A	420 A

PROTECTION & SYSTEM

Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature
Cooling Method	Air Cooling (Smart Fan)
Communication	CAN / RS485

ENVIRONMENT & PHYSICAL

Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C
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ESS GU Series

RACK UPS MODULE

11 kWh · 23 kWh · 30 kWh

LiFePO4
Premium LFP cells

Rack UPS Module



ESS GU SERIES · 30
KWH

Technical Specifications

SPECIFICATIONS

3 Models

Model	11 kWh	23 kWh	30 kWh
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Module Configuration	1P20S	1P20S	1P20S
Number of Modules	3	6	9
ELECTRICAL PERFORMANCE			
Battery Voltage	192 VDC	384 VDC	512 VDC
Single Cell Capacity	60 Ah	60 Ah	60 Ah
Battery Level	11.52 kWh	23.04 kWh	30.72 kWh
Voltage Range	174–218 VDC · 348–432 VDC · 464–570 VDC		
Max Charge Current	30 A	30 A	30 A
Max Discharge Current	240 A	240 A	240 A
PROTECTION & SYSTEM			
Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature		
Cooling Method	Air Cooling (Smart Fan)		
Communication	CAN / RS485		
ENVIRONMENT & PHYSICAL			
Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C		

ESS GU Series

RACK UPS MODULE

46 kWh · 61 kWh

LiFePO4
Premium LFP cells

Rack UPS Module



ESS GU SERIES · 61
KWH

Technical Specifications

SPECIFICATIONS

2 Models

Model	46 kWh	61 kWh
Cell Chemistry	LiFePO4	LiFePO4
Module Configuration	1P20S	1P20S
Number of Modules	6	9

ELECTRICAL PERFORMANCE

Battery Voltage	192 VDC	232 VDC / 288 VDC
Single Cell Capacity	120 Ah	120 Ah
Battery Level	46.08 kWh	61.44 kWh
Voltage Range	174–218 VDC · 232–288 VDC	
Max Charge Current	60 A	60 A
Max Discharge Current	480 A	480 A

PROTECTION & SYSTEM

Protection Functions	Overcharge / Overdischarge / Overcurrent / Short-circuit / Overtemperature
Cooling Method	Air Cooling (Smart Fan)
Communication	CAN / RS485

ENVIRONMENT & PHYSICAL

Operating Temperature	Charge 0°C~+55°C · Discharge -20°C~+55°C
Storage Temperature	0°C · 20°C · 6 months at 25°C

PEC Series PV + ESS + Charger

All-in-One EV Charging Station

PV inverter, lithium battery and EV charging outlets in one cabinet. Dual-gun DC fast charging with adaptive power sharing — ideal for commercial parking, highway service areas and zero-carbon industrial parks.

120 kW

MAX CHARGING POWER

112 / 208

BATTERY (KWH)

50 kW

INVERTER

Air / Liquid

COOLING



PEC Series

PV+ESS+CHARGER ALL-IN-ONE

PEC-50PCS-120EV-208 kWh

LiFePO4
Premium LFP cells

PV+ESS+Charger All-in-One



PEC SERIES · PEC-50PCS-120EV-208 KWH

Technical Specifications

SPECIFICATIONS

1 Models

Model PEC-50PCS-120EV-208KWH

ENERGY STORAGE PARAMETERS

Battery Type	LiFePO4
Battery Energy	208 kWh
Battery Voltage Range	582.4–748.8 VDC
DC Recharge Voltage Range	582.4–748.8 VDC
Max DC Recharge Current	157 A
DC Recharge Power	100 kW
Charging Port	National Standard DC Recharge Socket
Charging Parameters	—
DC Output Adjustment	200–1000 V
Max DC Output	250 A
Max DC Output Power	120 kW
Full Load Efficiency	> 95% (rated); peak > 97%; full load > 96.5% @ 750 VDC input
Current Stabilization Accuracy	< ±1%
Voltage Stabilization Accuracy	< ±0.5%
Charging Connector	250 A National Standard DC Charging Gun

PV INPUT (DC)

PEC Series

PV+ESS+CHARGER ALL-IN-ONE

PEC-50PCS-60EV-112 kWh

LiFePO4
Premium LFP cells

PV+ESS+Charger All-in-One



PEC SERIES · PEC-50PCS-60EV-112 KWH

Technical Specifications

SPECIFICATIONS

1 Models

Model PEC-50PCS-60EV-112KWH

PV PARAMETERS

PV Input Voltage Range	200–800 V
PV Startup Voltage	250 V
Max PV Voltage	850 V
MPPT Trackers	2
Max PV Power	38.4 kW + 38.4 kW
Max PV Input Current	64 A + 64 A

AC SIDE (OFF-GRID / ON-GRID)

Rated Power	50 kW
Max Current	80 A
Rated Grid Voltage	400 V / 230 V
Grid Voltage Range	–20% – +20%
Frequency Range	50 Hz / 60 Hz (47–62 Hz)
Current Harmonics	< 3% (resistive load)
Power Factor	–1 – 1

ENERGY STORAGE PARAMETERS

Battery Type LiFePO4