

Company Introduction

ALPHA ENERGY STORAGE SOLUTION CO., LTD.

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Our Concentration



vs.



*Without ESS
PV energy is not
sustainable.*

*Without PV
storage system is not
profit-efficient for now.*

Our Concentration



AlphaESS provides Energy Storage Solution
specifically designed for PV market.

- PV Generation
- Feed-in
- Direct Consumption
- Battery Charge
- Grid to Load
- Grid Consumption
- Self-consumption
- Grid Charge

100% 15.08KWH

12% 1.75KWH

18.63KWH

88% 13.33KWH

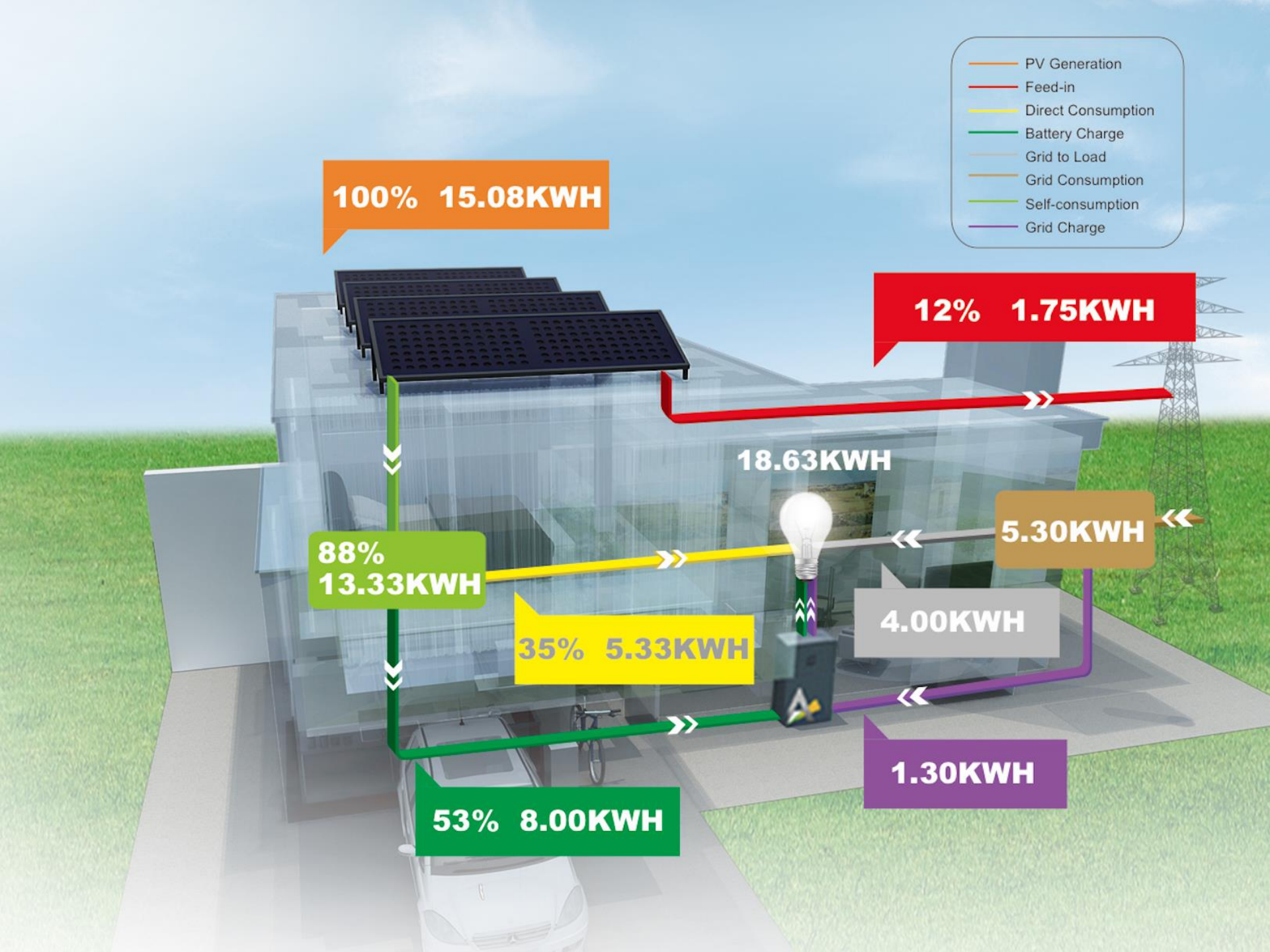
5.30KWH

35% 5.33KWH

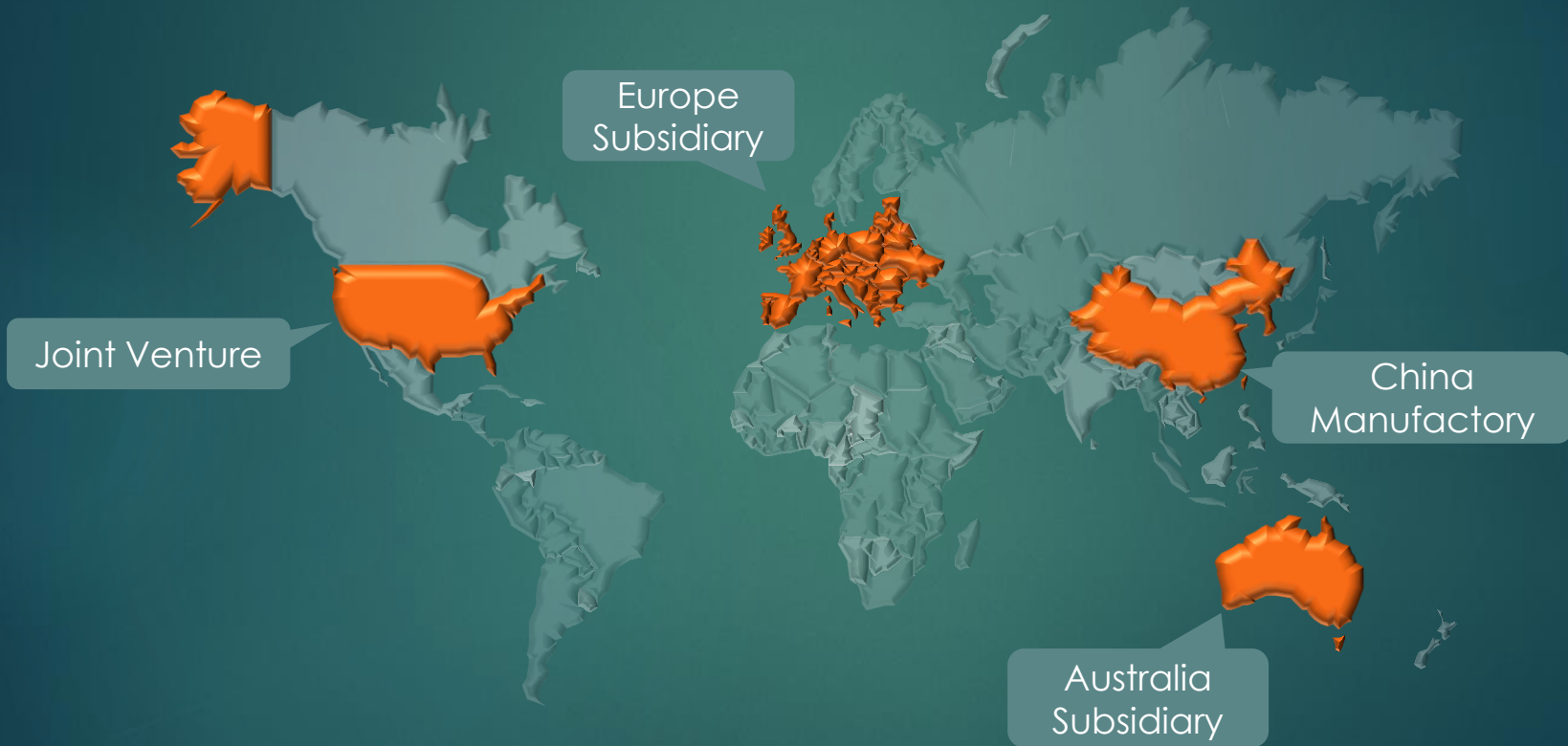
4.00KWH

53% 8.00KWH

1.30KWH



Our Markets



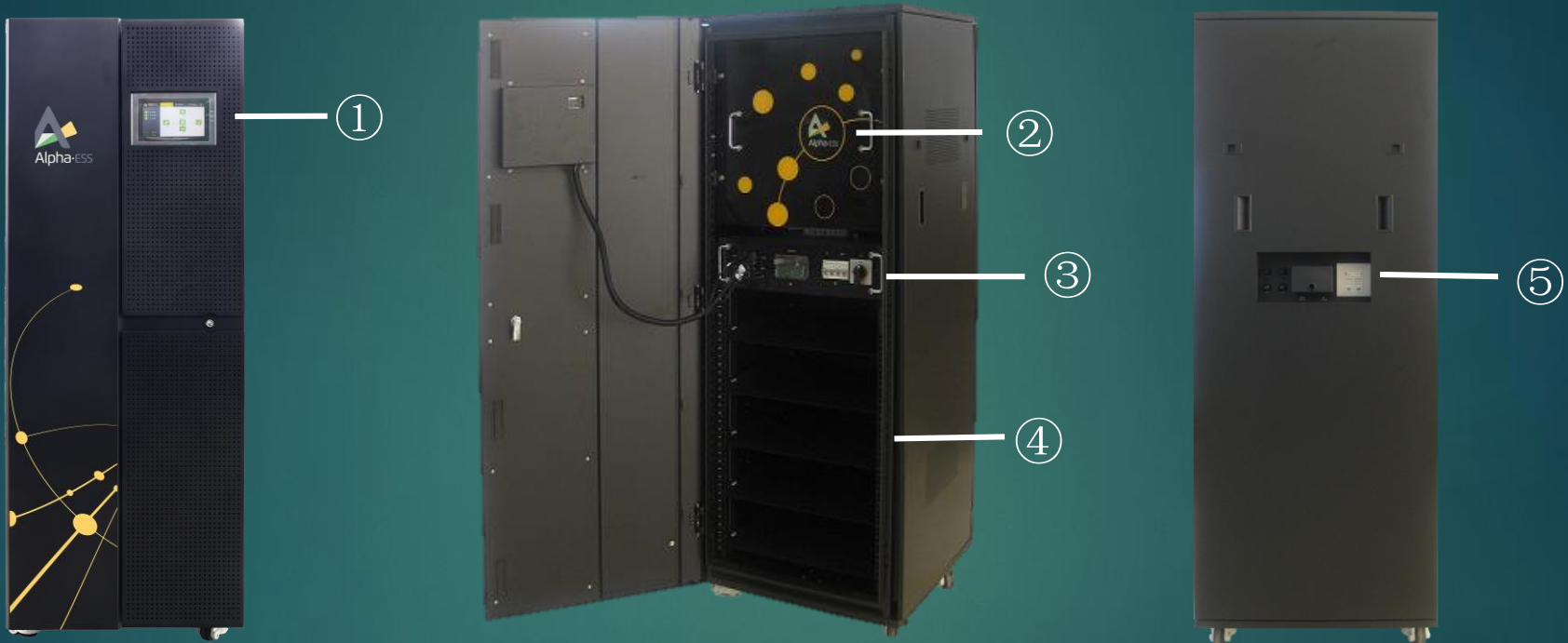
Milestones



Products

STORION			Alpha-Centauri	Storion PowerPlug
S3	S5	T6	3KW	2.5KWh/pcs
				


STORION-System Lookout



- ① EMS LCD touch panel
- ② Inverter (behind logo panel)
- ③ Cable box
- ④ Battery modules
- ⑤ Connection ports on backside

STORION-Cabinet

Cabinet

Outline Dimensions (WxDxH)	650×610×1630 mm	
Weight	135 kg	
Max. Modules	5 (12.5 KWh)	
Color	Black	
Work Environment	Temperature: 0°C To 40°C, Relative humidity: 15%--95%	
IP Protection Class	IP21	

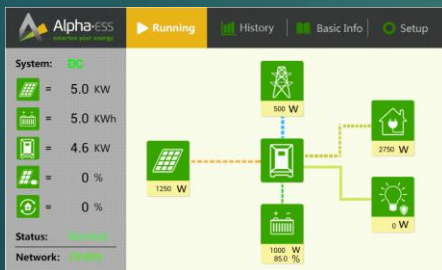
STORION-EMS

EMS

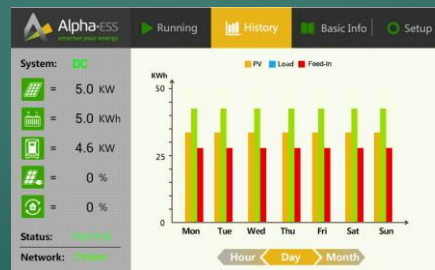
- High Compatibility
 - Able to operate with multiple Inverters, batteries.
- Visualization
 - Can be monitored via online monitoring program and mobile APPs
- Easy Maintenance
 - Both EMS and BMS firmware can be easily updated by a single USB port
 - Can be updated by yourself for free



Status Display



PV generation, external grid power, battery status, load on grid, secured load



PV generated power, home load and power fed into grid by selection of hour, day, month or year



Basic info and USB update function

STORION-Hybrid Inverter

3KW Inverter

Maximum PV Input Power	4500 W
No. of MPPTs	1
MPPT Voltage Range	120 VDC - 450 VDC
Maximum PV Input Current / Voltage	1 x 18 A / 500 VDC
Battery Nominal Voltage	48 V
Max. Charging Power / Current	1250 W / 25 A
Max. Discharging Power	3000 W
Max. Grid Output Power	3000 W
Max. Grid Output Current	13 A
Grid Output Range	184-265 VAC ;
Euro efficiency	95%
Standards	VDE4105,VDE0126-1-1/A1, AS4777.2/.3,IEC62109-1 &-2,AS3100,IEC62040-1



STORION-Hybrid Inverter

5KW Inverter

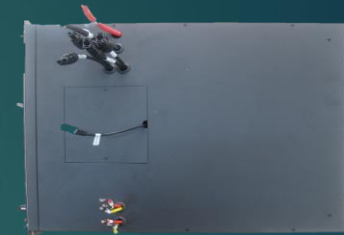
Maximum PV Input Power	5400 W
No. of MPPTs	2
MPPT Voltage Range	125 VDC - 550 VDC
Maximum PV Input Current / Voltage	2 x 15 A / 580 VDC
Battery Nominal Voltage	48 V
Max. Charging Power / Current	2300 W / 50 A
Max. Discharging Power	4600 W
Max. Grid Output Power	4600 W
Max. Grid Output Current	20 A
Grid Output Range	180-270 VAC ;
Euro efficiency	97%
Standards	VDE4105,VDE0126-1-1/A1, AS4777.2/.3,IEC62109-1&-2,AS3100,IEC62040-1



STORION-Cable Box



Rear Side View



Top View



Side View



Front View

Features:

- *Easy Mounting, Safety Enhancement*
- *Modular Design, Plug-and-Play*
- *Trouble-free Maintenance*

STORION-Battery Modules

M4850

Max. Charge Current	25 A (0.5C)
Max. Discharge Current	25 A (0.5C)
Max. Charge Current (OFF-GRID)	25 A (0.5C)
Max. Discharge Current (OFF-GRID)	50 A (1C)
Max. Discharge Pulse Current (10S)	100 A
Power Consumption	<2 W (Work) <100 mW (Sleep)
Energy Capacity	2.5 kWh
Usable Capacity	2.0 kWh
DOD	80%
Nominal Voltage	51.2
Operating Temperature Range	0°C To 40°C
Internal Resistance	≤100 mΩ
Cycle Life	≥6000 @80%



STORION-Battery Modules

M4860

Max. Charge Current	30 A (0.5C)
Max. Discharge Current	30 A (0.5C)
Max. Charge Current (OFF-GRID)	30 A (0.5C)
Max. Discharge Current (OFF-GRID)	60 A (1C)
Max. Discharge Pulse Current (10S)	100 A
Power Consumption	<2 W (Work) <100 mW (Sleep)
Energy Capacity	3 kWh
Usable Capacity	2.4 kWh
DOD	80%
Nominal Voltage	51.2
Operating Temperature Range	0°C To 40°C
Internal Resistance	≤100 mΩ
Cycle Life	≥6000 @80%



Alpha-Centauri Series

Inverter Rated Power	3000w or 5000w
Installed Storage Capacity	9.6kwh (extendable)
Battery type	Lead Crystal
Battery Cycle life	≥1800 @50%
Usable Capacity	4.8 kwh (50% DOD)
Max. Charge Current	25 A
Max. Discharge Current	30 A
Max. Charge Current (OFF-GRID)	25 A
Max. Discharge Current (OFF-GRID)	60 A
Max. Discharge Pulse Current (10S)	2000 A
Self-discharge after 90 days	<10%
Operating Temperature Range	- 20°C To 50°C
Transport/Storage Temperature Range	- 40°C To 60°C



PowerPlug

Cabinet

Outline Dimensions (WxDxH)	600 x 600 x 800 mm
Max. Modules	4 (10KWh)
Color	Black
Work Environment	Temperature: - 40°C To 60°C, Relative humidity: < 95 %
IP Protection Class	IP2(0)
Standards / Certificates	ANSI EIA, RS-310-D, IEC297-2, DIN41491, PART1, DIN41494, PART7, GB / T3047.2-92, 19" International standard Metric standard, ETSI
Safety	① Excellent conductivity and antistatic ability; ② High shock resistance performance
Reliability	① Firm and stable structure ② Cabinet bearing capacity: 800 kg (While still), > 500 kg (While moving) ③ Tray bearing capacity: 50 kg



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