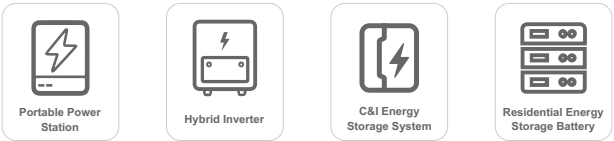


EAST GROUP CO., LTD.



ESS Brochure



Portable Power Station EHB0510/EHB1020



500W | 1000Wh

1000W | 2000Wh

- Extra long cycle, reached 8000+, used ≥10 years
- Lightweight & convenient, flexible arrangement
- Multiple output interfaces, pure sine waves, matching multiple electrical loads
- Extra large power, use with confidence
- Lithium ion phosphate battery system

Appearance



Specification

MODEL	EHB0510		EHB1020	
Output				
AC output	Pure Sine Wave			
	500W		1000W	
	230Vac(50/60Hz)			
UPS transfer time	≤20ms			
USB-A(×2 output)	5V 3A(constant voltage), max. 15W/each			
USB-C(×1 output)	20W			
DC5521(×4 output)	12V±3% max. 4A			
Parallel	Na			
Others				
Display	LED			
Material	Metal			
Cooling mode	Air cooling			
Switch	Button			
IP rating	IP20			
Dimension(W×H×D)(mm)	135×245×320		210×295×315	
Net weight (kg)	≈10.5		≈18.5	
Battery				
Rated energy	1004.8Wh		2009.6Wh	
Cell material	LFP			
Cycle life	After 8000 cycles, remaining capacity ≥70%			
Protections	High temperature, low temperature, overdischarge, overcharge, overload, short circuit, overcurrent protection			
Input				
PV voltage range	11~55V			
PV current	Max. 10A		Max. 15A	
AC input power	500W		1000W	
AC input voltage	220~240Vac; 50/60Hz			
Optimal ambient temperature	20~30℃			
Discharge ambient temperature	-10~60℃			
Charging ambient temperature	0~50℃			
Storage ambient temperature	-20~45℃(20~30℃ suitable)			
Certification	UN38.3			

Off-Grid Inverter

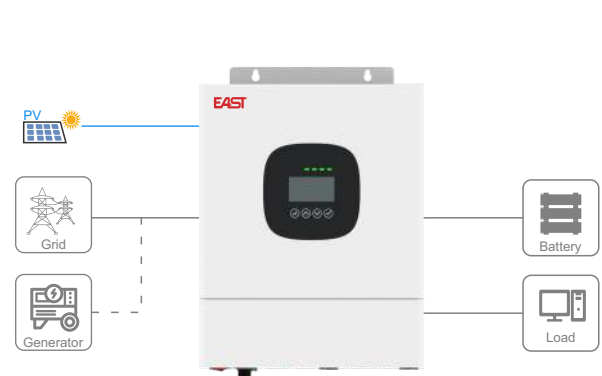
EAO3K/5K1PLVG4-AA

Single phase

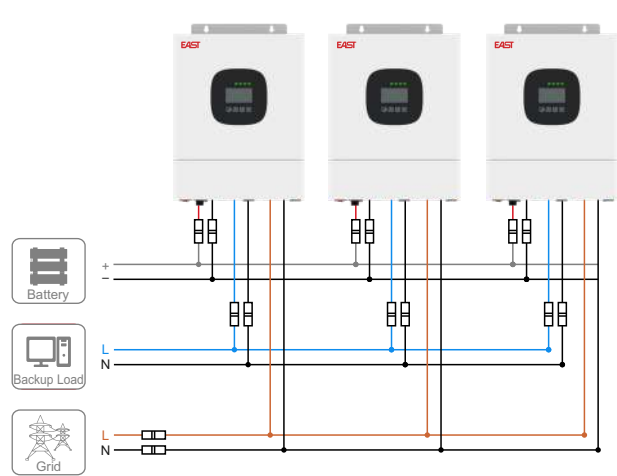


-  Flexible setting of multiple working modes according to preferences
-  Real time remote monitoring system via WiFi module, easy operation and maintenance
-  Graphical LCD and keypad design, user-friendly operation interface
-  High charge/discharge efficiency, compatible with lithium battery and lead-acid battery

Typical application



Parallel application



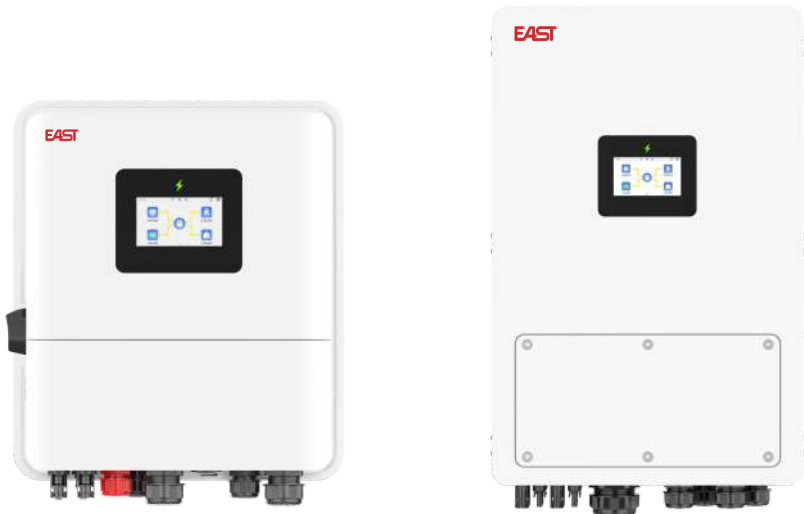
Specification

MODEL	EAO3K1PLVG4-AA	EAO5K1PLVG4-AA
Rated power	3000VA/3000W	5000VA/5000W
Parallel function	No	Yes, 6 units max
AC input		
Rated input voltage	230Vac	
Input voltage range	170~280Vac PC, 90~280Vac home application	
Rated input frequency	50/60Hz self-adapting	
Input frequency range	40~65Hz	
Rated input current	17.4A	32A
Max. input current	20A	40A
AC output		
Rated AC output voltage	230Vac	
Output settable voltage	220V/230V/240V	
Output settable frequency	50Hz/60Hz	
Rated AC output current	13.05A	21.70A
Overload capacity	60s@105%~110% Load; 10s@110%~130% Load 3s@130%~150% Load; 0.2s@>150% Load	60s@105%~110% rated load; 10s@110%~150% rated load; 5s@150%~180% rated load; 300ms@≥180% rated load
THDv	<5%, linear load; <10%, non-linear load	
Efficiency(peak value)	93%	
Surge power	6000VA, 10 cycles	10000VA, 10 cycles
Switching time	10ms(Typical)	
Battery		
Battery type	Lead-acid battery/lithium battery	
Rated voltage	24Vdc	48Vdc
Charging voltage	27Vdc(default), 24~29.2Vdc settable	54Vdc(default), 48~58.4Vdc settable
Overcharge protection voltage	30.2Vdc	60.5Vdc
Rated discharge current	130A	113.7A
PV/AC charging		
PV charging	MPPT	
Max. PV input power	5000W	6000W
Max. PV input open circuit voltage	500Vdc	
MPPT operation range voltage	120~450Vdc	
Max. PV input current	18A	27A
Max. PV charging current	100A	
Max. AC charging current	100A	
Max. battery charging current	100A	
Others		
Dimension(W×H×D)(mm)	300×380×115	349×375×115
Net weight(kg)	6.6	9.2
Operating environment	-10℃~50℃	
IP rating	IP20	
Protections	Input over/under voltage protection, input over/under frequency protection, output overload, output short-circuit, radiator over temperature protection, fan fault detection etc.	
Communication interfaces	USB/RS485, dry contact, WiFi(optional)	

Hybrid Inverter

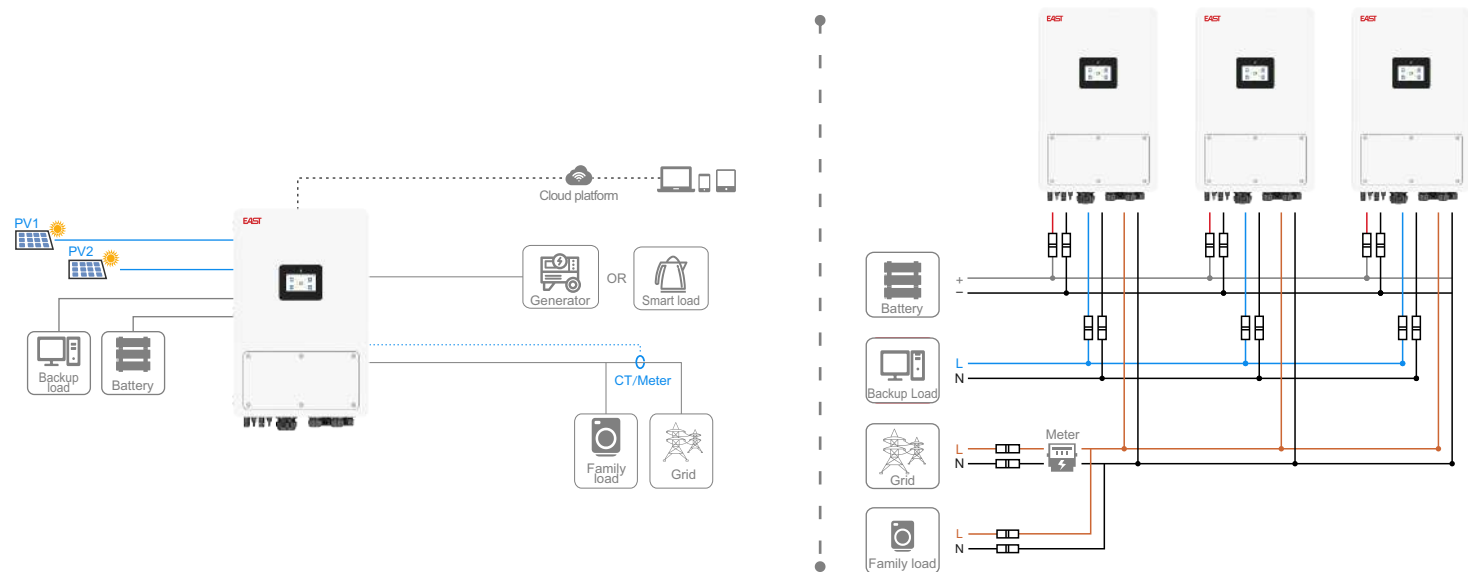
ESH6K/8K/12K1PLVG2-AA

Single phase



- Three independent MPPT channels, 200% oversized PV capacity with 160% usable power, 36A current per MPPT channel, max. 250A battery charge/discharge current
- Compatible with 40~60V lithium & lead-acid batteries, support generator connection, smart load output and AC coupling
- Powerful parallel capability: up to 9 units for single-phase parallel connection, 3 units combinable to build three-phase system
- IP66 dustproof & waterproof design, equipped with seamless UPS backup transfer function for power outage

Typical application



Specification

MODEL	ESH6K1PLVG2-AA	ESH8K1PLVG2-AA	ESH12K1PLVG2-AA
PV input			
Max. input power	12000W	16000W	24000W
Max. input voltage	500V		
Start-up voltage	90V		
MPPT voltage range	70V~450V		
Max. input current	20A	40A	40A
Max. short circuit current	25A	50A	50A
Number of MPPT/ Max. number of PV strings	2/1	2/2	3/2
Battery input/output			
Battery voltage range	40V~60V		
Max. charge/ discharge current	140A/140A	190A/190A	250A/250A
Max. charge/ discharge power	6600W/6600W	8000W/8000W	12000W/12000W
Battery BMS communication	RS485/CAN		
AC output(Backup & Smart)			
Rated output power	6000W	8000W	12000W
Max. apparent output power	6600VA	8800VA	13200VA
Rated output current	30A	40A	60A
Rated output voltage/ frequency	L+N+PE, 220V/230V/240V, 50Hz/60Hz		
Power factor	>0.99(0.8 leading~0.8 lagging)		
THDi	<3%@rated power		
EPS switching time	<10ms		
Starting surge	10s@2×rated power		
THDu	<3%(Linear load)		
AC input(Grid & Gen)			
Max. AC charging power (grid to battery)	6600W	8000W	12000W
Max. grid input current	41A	68.2A	
Max. generator input power	6600W	12000W	
Rated input voltage/ frequency	L+N+PE,220V/230V/240V, 50Hz/60Hz		
Efficiency			
Max. efficiency	97.3%	97.6%	
European efficiency	96.5%	97%	
MPPT efficiency	99%		
General parameters			
Display	LED+LCD		
Communications	RS485/CAN(for BMS), RS485, CAN(for parallel), 1 DO, 1 DI, Wi-Fi, LAN(Optional)		
Max. operation altitude	4000m(>2000m derating)		
IP rating	IP66		
Operating temperature	-25°C~60°C		
Humidity	0~100%		
Cooling mode	Smart Cooling		
Noise level	<40dB		
Dimensions(W×H×D)(mm)	367x421x215	443x679x209	
Net weight(kg)	11.5	31.1	

Hybrid Inverter

ESH14K/16K1PLVG1-AA

Single phase



- 

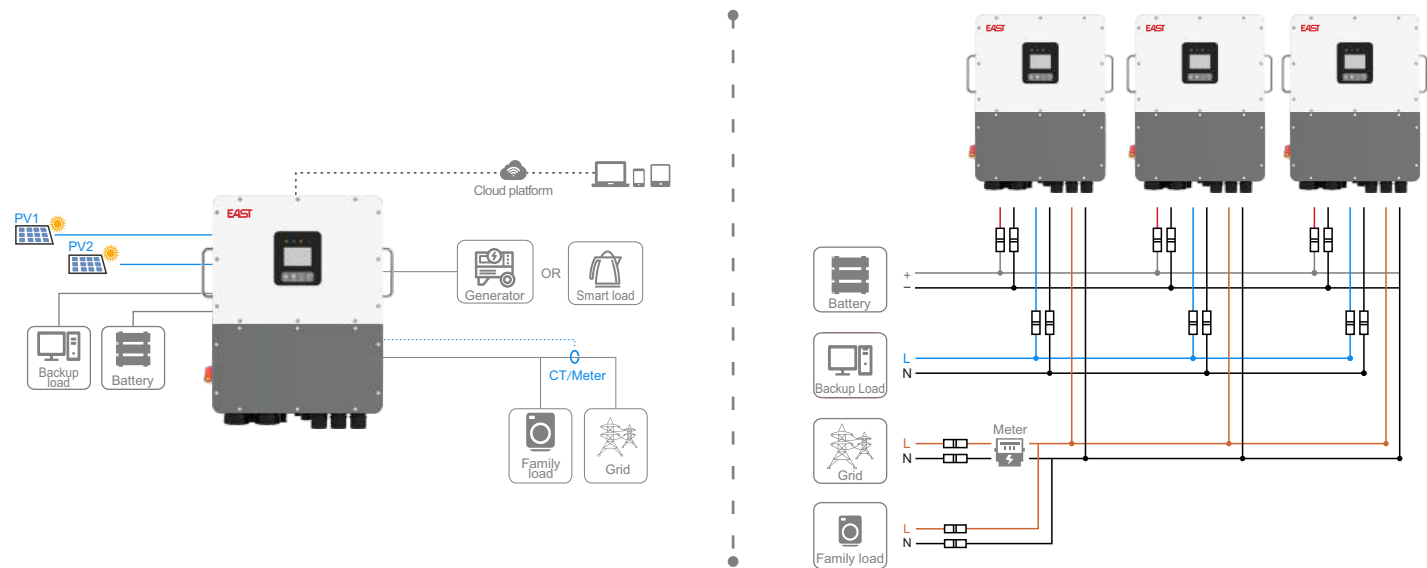
2.3 independent MPPT, 150% PV oversizing for higher yield
- 

<10ms UPS-level switching, AC coupling ready for system retrofit
- 

Max. 275A charge/discharge, compatible with genset, up to 6 units parallel
- 

Full aluminum IP66 enclosure, stable operation under harsh environments

Typical application



Specification

MODEL	ESH14K1PLVG1-AA		ESH16K1PLVG1-AA	
PV input				
Max. input power	21000W		22500W	
Max. input voltage	550V			
Start-up voltage	120V			
MPPT voltage range	120V~520V			
Max. input current	26A			
Max. short circuit current	39A			
Number of MPPT/ max. number of PV strings	3/2+2+2			
Battery input/output				
Battery voltage range	40V~60V			
Max. charge/ discharge current	275A/275A			
Max. charge/ discharge power	14000W		16000W	
Battery BMS communication	RS485/CAN			
AC output(Backup & Smart)				
Rated output power	14000W		16000W	
Max. apparent output power	14000W		16000W	
Rated output current	60.9A		69.6A	
Rated output voltage/ frequency	L+N+PE, 220V/230V/240V, 50Hz/60Hz			
Power factor	>0.99(0.8 leading~0.8 lagging)			
THDi	<3%@rated power			
EPS switching time	<10ms			
Starting surge	10s@2×rated power/1min@1.5×rated power			
THDu	<3%(Linear load)			
AC input(Grid & Gen)				
Max. AC charging power (grid to battery)	14000W		16000W	
Max. grid input current	60.9A		69.6A	
Max. diesel generator input current	28000A		32000A	
Rated input voltage/ frequency	L+N+PE, 220V/230V/240V, 50Hz/60Hz			
Input voltage range	184~276Vac(L-N)			
Efficiency				
Max. efficiency	97.5%			
European efficiency	97.00%			
MPPT efficiency	99.90%			
General parameters				
Display	LCD+APP			
Communications	RS485/WiFi/CAN/DRM(Optional: Bluetooth/LAN/Meter)			
IP rating	IP66			
Operating temperature	-25°C~+60°C(Linearly derating to 60% when exceed +45°C~+60°C)			
Humidity	0~95%(Non-condensing)			
Cooling mode	Intelligent Air Cooling			
Noise level	<65 dB			
Dimensions(W×H×D)(mm)	448×660×265			
Net weight(kg)	45			

Hybrid Inverter

ESH8K/10K/15K/20K3PLVG1-AA

Three phase



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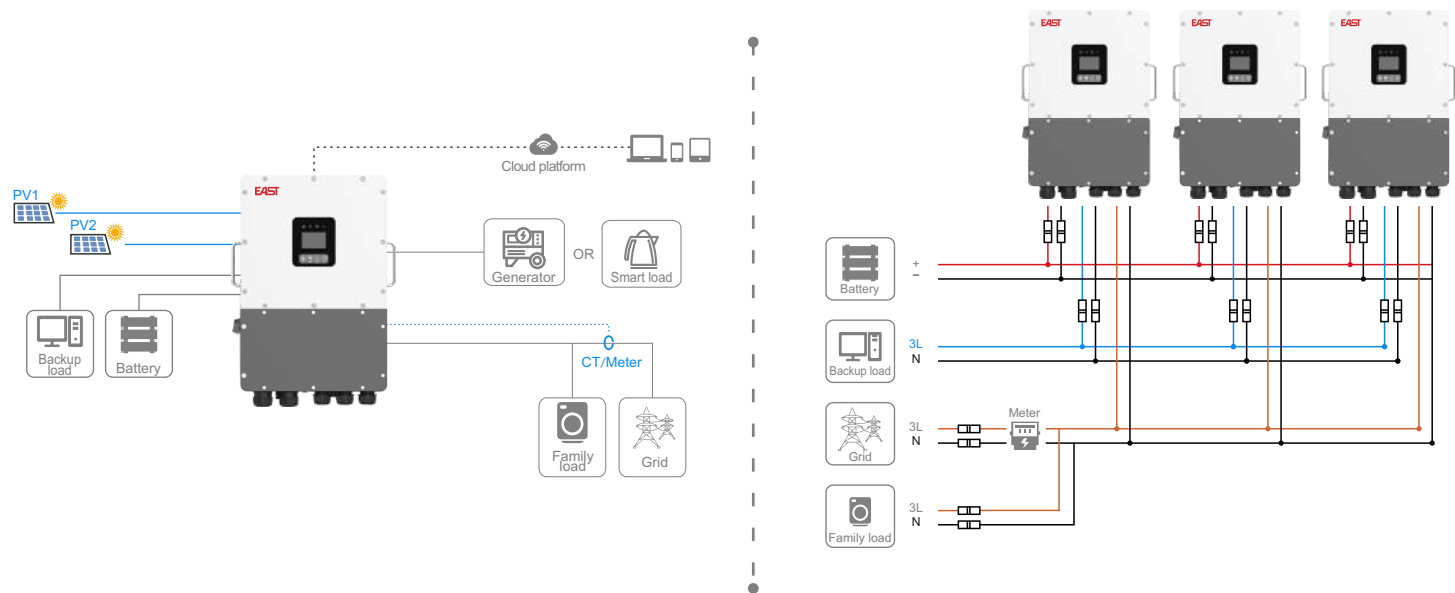
2 independent MPPT(2/2+2), max. PV input 48kW, MPPT efficiency up to 99.9%
- 

3 battery ports, max. 415A charge/discharge, up to 8 units parallel, AC coupling available
- 

2xrated surge power for 10s, supports 150% three-phase unbalanced output
- 

SiC high efficiency design, full aluminum IP66 enclosure, full-load operation without derating at 45°C

Typical application



Specification

MODEL	ESH8K3PLVG1-AA	ESH10K3PLVG1-AA	ESH15K3PLVG1-AA	ESH20K3PLVG1-AA
PV input				
Max. input power	16000W	20000W	30000W	40000W
Max. input voltage	1000V			
Start-up voltage	180V			
MPPT voltage range	150V~850V			
Max. input current	20A			
Max. short circuit current	30A			
Number of MPPT/ max. number of PV strings	2/2+2			
Battery input/output				
Battery voltage range	40V~60V			
Max. charge/ discharge current	180A/180A	220A/220A	315A/315A	390A/390A
Max. charge/ discharge power	8000W	10000W	15000W	20000W
Battery BMS communication	RS485/CAN			
AC output(Backup & Smart)				
Rated output power	8000W	10000W	15000W	20000W
Max. apparent output power	8000VA	10000VA	15000VA	20000VA
Rated output current	12A	15A	22A	29A
Rated output voltage/ frequency	3L+N+PE, 380V/400V, 50Hz/60Hz			
Power factor	>0.99(0.8 leading~0.8 lagging)			
THDi	<3%@rated power			
EPS switching time	<20ms			
Starting surge	10s@2×rated power/60s@1.5×rated power/3min@1.2×rated power/6min@1.1×rated power			
THDu	<3%(Linear load)			
AC input(Grid & Gen)				
Max. AC charging power (grid to battery)	8000W	10000W	15000W	20000W
Max. grid input current	24A	29A	43A	58A
Max. diesel generator input current	13.5A	16.8A	25.3A	33.7A
Rated input voltage/ frequency	3L+N+PE, 380V/400V, 50Hz/60Hz			
Efficiency				
Max. efficiency	97.5%		98.0%	
European efficiency	97.00%		97.20%	
MPPT efficiency	99.90%			
General parameters				
Display	LCD+APP			
Communications	RS485/WiFi/CAN/DRM(Optional: Bluetooth/LAN/Meter)			
IP rating	IP66			
Operating temperature	-25°C~~+60°C(Linearly derating to 60% when exceed +45°C~~+60°C)			
Humidity	0~95%(Non-condensing)			
Cooling mode	Intelligent Air Cooling			
Noise level	<65 dB			
Dimensions(W×H×D)(mm)	448x660x265			
Net weight(kg)	45			

Hybrid Inverter

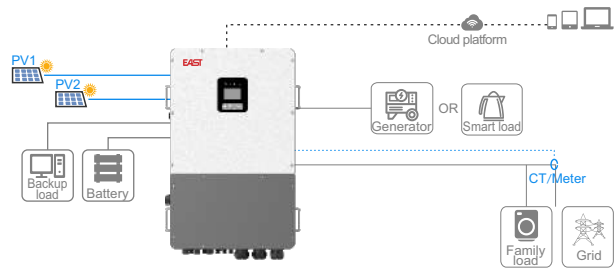
ESH30K/40K/50K/60K3PHVG1-EU

Three phase

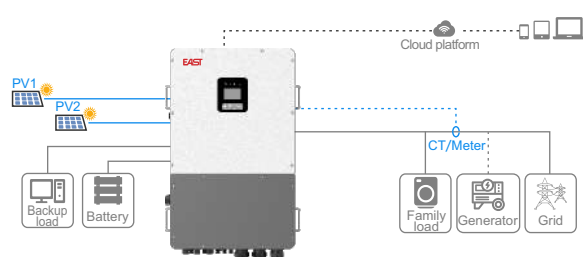


- Built-in high precision MPPT controller, wide PV voltage operating range to maximize solar energy capture efficiency
- Supports high voltage lithium battery series connection, allowing multiple battery clusters parallel expansion for flexible energy capacity configuration
- Ultra fast EPS transfer time less than 20ms, guaranteeing uninterrupted power supply for critical loads
- Multiple protection functions integrated, adapting to harsh outdoor operating environments for long-term stable operation

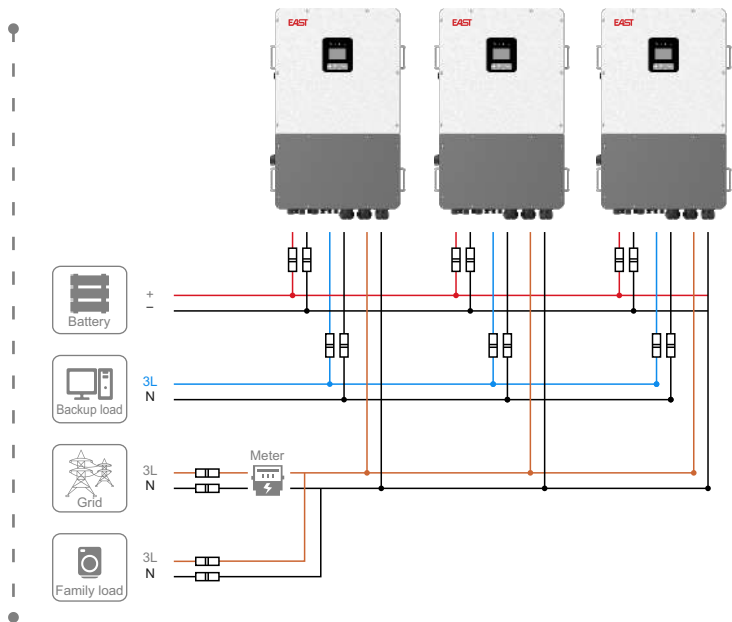
Typical application 1



Typical application 2



Parallel application



Specification

MODEL	ESH30K3PHVG1-EU	ESH40K3PHVG1-EU	ESH50K3PHVG1-EU	ESH60K3PHVG1-EU
PV input				
Max. input power	60kW	80kW	100kW	
Max. input voltage	1000V			
Start-up voltage	200V			
MPPT voltage range	150~850V			
Max. input current	20A			
Max. short circuit current	30A			
Number of MPPT/ max. number of PV strings	4/2+2+2+2			
Battery input/output				
Battery voltage range	135~850V			
Max. charge/ discharge current	100A/100A			
Max. charge/ discharge power	30kW	40kW	50kW	60kW
Battery BMS communication	RS485			
AC output(EPS & Smart)				
Rated output power	30kW	40kW	50kW	60kW
Max. apparent output power	30kVA	40kVA	50kVA	60kVA
Rated output current	45.6/43.3A	60.8/57.7A	76/72.2A	91.2/86.6A
Rated output voltage/ frequency	380/400V, 3L+N+PE, 50/60Hz			
Power factor	0.8 leading~0.8 lagging			
THDi	<3%@rated power			
EPS switching time	<20ms			
Starting surge	30s@1.1×rated power/10s@1.2×rated power/0.2s@1.5×rated power			
THDu	<3%(Linear load)			
AC input(Grid & Smart)				
Max. AC charging power (grid to battery)	30kW	40kW	50kW	60kW
Max. grid input current	91.2A	121.6A	152A	182.4A
Max. diesel generator input current	45.6/43.3A	60.8/57.7A	76/72.2A	91.2/86.6A
Rated input voltage/ frequency	380/400V, 3L+N+PE, 50/60Hz			
Efficiency				
Max. efficiency	98.5%			
European efficiency	97.50%			
MPPT efficiency	99.90%			
General parameters				
Display	LCD			
Communications	Ethernet, RS485, 4G/WIFI			
IP rating	IP66			
Operating temperature	-25~+60°C(>45°C linear derating to 60%)			
Humidity	<95%(non-condensing)			
Cooling mode	Air cooling			
Noise level	<65dB			
Dimensions(W×H×D)(mm)	544×880×278			
Net weight(kg)	88			

C&I Energy Storage System

30k-60k/100kWh-120kWh

Diesel-PV-ESS



- High protection level: cabinet IP54, Inverter IP66 protection, can be used in a variety of harsh scenarios

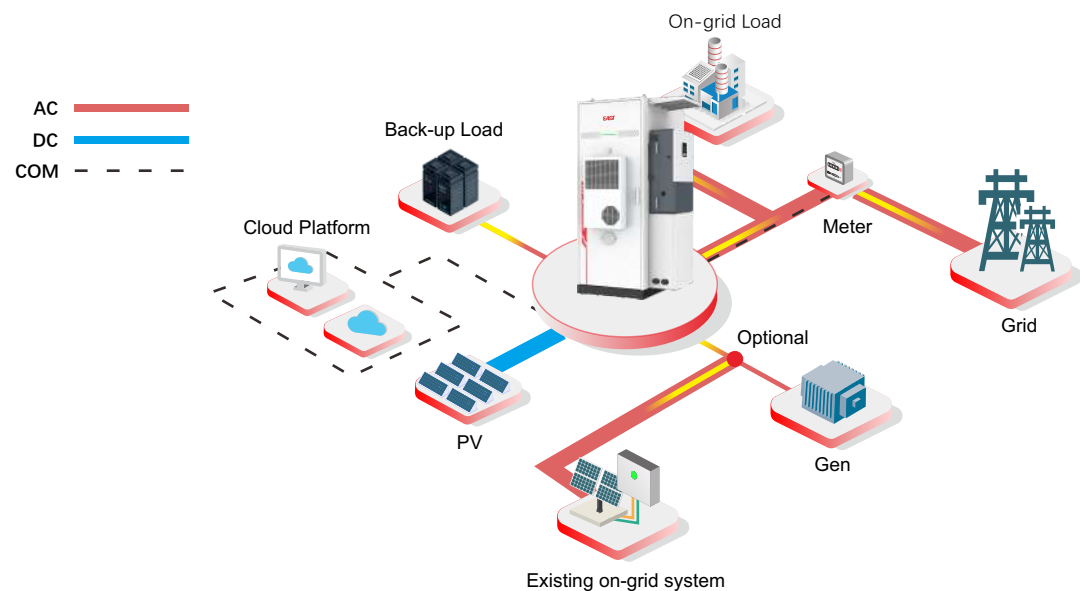
Three-level fire-fighting strategy: Level 1 power off and shutdown protection, Level 2 perfluorohexanone gas start, Level 3 water spray fire-fighting to prevent re-ignition

High conversion efficiency: the hybrid inverter adopts SiC technology, with the highest conversion efficiency reaching 98.5%, reducing the cost
- Intelligent monitoring: real-time intelligent power balance control, energy management and scheduling, information monitoring and early warning, safe and reliable system

Modular design: the system consists of battery cabinet, hybrid inverter, and EMS modules, which can be flexibly configured and support dynamic expansion

Application scenarios: industrial and commercial energy storage, emergency backup power supply, Diesel-PV-ESS microgrid, etc.

Typical application



Specification

MODEL	30kW-100kWh	40kW-100kWh	50kW-100kWh	30kW-120kWh	40kW-120kWh	50kW-120kWh	60kW-120kWh
System							
Rated energy capacity	100kWh			120kWh			
Rated system power	30kW	40kW	50kW	30kW	40kW	50kW	60kW
On-grid and off-grid switching time	<20ms						
Max. conversion efficiency	98.50%						
European/MPPT efficiency	97.5%/99.9%						
IP rating	Battery cabinet(IP54), Inverter(IP66)						
Operating temperature	-25~+60°C(>45°C linear derating to 60%)						
Relative humidity	<95%(non-condensing)						
Altitude	<4000m						
Cooling method	Air cooling						
Noise	<65dB						
Fire protection system	cabinet level gas fire-fighting(perfluorohexanone)/aerosol+water fire-fighting						
Wired/wireless communication	Ethernet, RS485, 4G/WIFI						
Human-computer interaction	LCD						
Standards	VDE V 0124-100, VDE-AR-N 4105, Tor Erzeuger Type A, OVE R25, EN 50549-1, EN 50549-2, EAOT EN 50549-1, PAE 1165-2020, BWBR0037940 Netcode elektriciteit, NA-EEA-NE7, EIFS 2018: 2, Section 8 and 9, Type A, C10/11, MSZ EN 50549-1/-2, EN 50438 NS protection settings, CEI 0-21, UNE 217002, UNE 217001, NTS631						
Dimensions(W×H×D)(mm)	800x2100x1200						
Weight(kg)	≤1300						
Battery							
Cell	314Ah						
Configuration	1P100S			1P120S			
Rated energy	100kWh			120kWh			
Rated voltage	320Vdc			384Vdc			
Voltage range	280~365Vdc			336~438Vdc			
Inverter							
Inverter model	ESH30K3PHV G1-EU	ESH40K3PHV G1-EU	ESH50K3PHV G1-EU	ESH30K3PHV G1-EU	ESH40K3PHV G1-EU	ESH50K3PHV G1-EU	ESH60K3PHV G1-EU
PV parameters							
Max. input power	60kW	80kW	100kW	60kW	80kW	100kW	
Max. input voltage	1000Vdc						
Input voltage range	150~950Vdc						
Starting voltage	200Vdc						
Max. input current per string	8x20A						
Max. short-circuit current per string	8x30A						
MPPT voltage range	150~850Vdc						
MPPT quantity/strings per MPPT	4/2+2+2+2						
Grid parameters							
Rated input/output power	30kW	40kW	50kW	30kW	40kW	50kW	60kW
Voltage range	380V/400V, 3L+N+PE						
Rated input current	45.6/43.3A	60.8/57.7A	76/72.2A	45.6/43.3A	60.8/57.7A	76/72.2A	91.2/86.6A
Rated output current	45.6/43.3A	60.8/57.7A	76/72.2A	45.6/43.3A	60.8/57.7A	76/72.2A	91.2/86.6A
Power factor	>0.99(0.8 leading~0.8 lagging)						
THDi	<3%@rated power						
Diesel engine parameters							
Rated power	30kW	40kW	50kW	30kW	40kW	50kW	60kW
Voltage range	320V~460V						
Rated current	45.6/43.3A	60.8/57.7A	76/72.2A	45.6/43.3A	60.8/57.7A	76/72.2A	91.2/86.6A
Backup parameters							
Rated power	30kW	40kW	50kW	30kW	40kW	50kW	60kW
Rated voltage	380V/400V, 3L+N+PE						
Rated frequency	50Hz/60Hz						
Rated current	45.6/43.3A	60.8/57.7A	76/72.2A	45.6/43.3A	60.8/57.7A	76/72.2A	91.2/86.6A

C&I Energy Storage System

130k/261kWh

Diesel-PV-ESS



- 

High protection level: cabinet IP54, C4 anti-corrosion; Inverter IP66 protection, battery PACK IP67 protection, can be used in a variety of harsh scenarios
- 

Intelligent monitoring: real-time intelligent power balance control, energy management and scheduling, information monitoring and early warning, safe and reliable system
- 

High conversion efficiency: the PV-ESS inverter adopts SiC solution on a large scale, with the highest conversion efficiency reaching 98.2%, reducing the kWh cost
- 

Modular design: the system consists of battery cabinet, power distribution cabinet, and EMS modules, which can be flexibly configured and support dynamic expansion
- 

Three-level fire-fighting strategy: Level 1 power off and shutdown protection, Level 2 perfluorohexanone gas start, Level 3 water spray fire-fighting to prevent re-ignition
- 

Application scenarios: Industrial and commercial energy storage, emergency backup power supply, Diesel-PV-ESS microgrid, etc.

System Expansion



Flexible expansion of DC side
(1 distribution cabinet + 4 battery cabinets)
130kW/261-1044kWh system



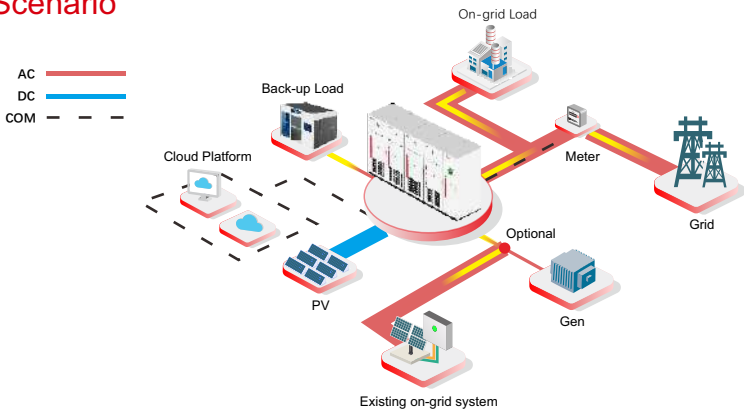
4 parallel connections



4 parallel connections

Backup side AC 4 parallel connections
130kW/261kWh*4 system

Application Scenario



Specification

MODEL	EAPVESS130k261kWh-C
Battery parameters	
Cell	314Ah
Configuration	1P260S
Rated energy	261kWh
Rated voltage	832Vdc
Voltage range	728~949Vdc
Max. expandable quantity	4 clusters
PV parameters	
Max. input power	260kW
Max. input voltage	950Vdc
Rated input voltage	810Vdc
Starting voltage	220Vdc
Max. input/short-circuit current	52/55A
MPPT quantity	6
Max. number of MPPT strings	3
Grid parameters	
Rated input/output power	260/130kW
Voltage range	380/400Vac(-20%~20%), 3/N/PE
Rated input current	394A/376.8A
Rated output current	197A/188.4A
Power factor	>0.99(0.8 lead~0.8 lag)
THDi	<3%@rated power
Diesel engine parameters	
Rated power	130kW
Voltage range	380/400Vac(-20%~20%), 3/N/PE
Rated current	197A/188.4A
Backup parameters	
Rated power	130kW
Rated voltage	380/400Vac, 3/N/PE
Rated frequency	50/60Hz
Rated current	197A/188.4A
THDi	<3%@linear rated power
System general parameters	
On-grid and off-grid switching time	<20ms
Max. conversion efficiency	99%
European/MPPT efficiency	98.2%/99.9%
IP rating	Battery cabinet(IP54), battery pack(IP67), power distribution cabinet(IP20), PV-ESS inverter(IP65), power distribution box(IP55)
Operating temperature	-30~60°C(>45°C derating)
Relative humidity	<95%RH(non-condensing)
Altitude	<4000m(>2000m derating)
Cooling method	Battery cabinet@Liquid cooling/PV-ESS inverter@air cooling
Noise	<65dB
Fire protection system	Cell level+cabinet level gas fire-fighting(perfluorohexanone)/aerosol+water fire-fighting
Wired/wireless communication	Ethernet(1 Modbus-TCP), RS485(1 Modbus-RTU)/4G/WIFI
Human-computer interaction	LED, APP, Web
Standards	IEC 62477-1:2012+AMD1:2016; EN 62477-1:2012+A11:2014+A12:2021; EN IEC 61000-6-2:2019; EN 50549-2:2019+A1:2023; EN 50549-10:2022 Type B; EN IEC 61000-6-4:2021; EN 62920:2017/A1:2021; EN 50549-2:2019 + A1:2023; EN 50549-10:2022 Type A
Dimensions(WxHxD)(mm)	1000x2250x1350@battery cabinet, 800x2250x1350@power distribution cabinet
Weight(kg)	≤2000@battery cabinet, ≤1000@power distribution cabinet

C&I Energy Storage System

EASS125k/261kWh-C

All in one



- Intelligent group series architecture, one cluster one management PCS three level topology, the whole machine energy conversion efficiency >90%, liquid cooling temperature control, battery temperature difference <3°C, auxiliary power consumption is reduced by 30%, the system life is extended by 2 years
- All in one design, landing is grid connection, no debugging of high energy density cell, system area reduced by 40%, no transformer design, lightweight
- Long-life LFP battery cells with >8000 cycles, equipped with explosion venting design and perfluorohexanone fire protection, provide multiple safety guarantees and support off-grid load carrying, serving as a backup powersource for critical loads
- Online monitoring of cloud platform, real-time warning of system faults, support remote and local upgrade of key equipment, intelligent maintenance and high-precision BMS, accurate calibration, and no expert on-site maintenance

Product Application Scenarios



Shopping Mall Building



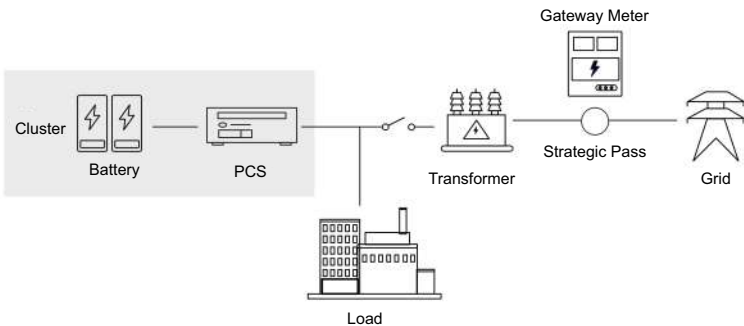
Industrial Park



Photovoltaic Storage and Charging Station



Public Construction Unit



Specification

MODEL	EASS125k/261kWh-C
DC side parameters	
Cell	LFP3.2V/314Ah
System battery configuration	1P260S
Rated capacity	261kWh
Rated voltage	832Vdc
Voltage range	650~936Vdc
On-grid AC side parameters	
Rated power	125kW
Rated voltage	400Vac
Voltage range	-20%~+15%
Rated frequency	50/60Hz
Frequency range	45~55Hz/55~65Hz
Power factor	±1
THDi	≤3%
Overload capacity	110%
Off-grid AC side parameters	
Rated power	125kW
Rated voltage	400Vac
Rated frequency	50/60Hz
THDv	≤3%
System parameters	
AC wiring mode	Three phase four line
System efficiency	≥90.0%
Charge/discharge rate	0.5P
Cycles	≥8000@25°C
IP rating	Battery protection@IP67, PCS protection@IP66, system protection@IP54
Operating temperature	-30°C~55°C
Relative humidity	0~95%RH(non-condensing)
Altitude	<3000m(derating above 3000m)
Cooling method	Liquid cooling
Fire protection system	Perfluorohexanone(PACK Grade)+active monitoring+water fire protection
Communication interface	LAN, RS485, TCP/IP, ICE61850
Dimensions(W×H×D)(mm)	1000x2350x1350
Weight(kg)	≤2500

Residential Energy Storage Battery

Residential energy storage systems offer high-quality new energy products that are simple to install, easy to operate, safe to use, and environmentally friendly, suitable for powering household appliances. They power household appliances, storing grid electricity in batteries during off-peak periods and then transferring it to the grid during peak periods. Their modular design allows multiple batteries to be connected in parallel to expand capacity, ensuring greater storage capacity for both household use and grid delivery.

Product types include rack-mounted, stacked, vertical, and wall-mounted series, compatible with mainstream inverters on the market. Voltage levels include 24V, 48V, and 750V. Basic battery system capacities include 100Ah, 200Ah, and 314Ah. Multiple parallel groups are supported.

51.2V 102AH Rack-mounted LiFePO4 Battery



- Flexible Expansion: Max. 2 units(parallel connection at battery side); Max. 63 units(parallel connection at inverter busbar side)
- Integrated PACK: reduced line loss, enhanced energy density
- Comprehensive Protection: Advanced BMS with active fuse
- High compatibility, integrated design with mature and stable performance

MODEL		R5-21			
Model type		EFP48100R			
Cathode material		LiFePO4			
Rated voltage/V		51.2			
Cell capacity/Ah		102			
Rated energy/kWh		5.22	10.44	15.67	20.89
Standard parallel unit/P		1	2	3	4
Output power/kW		5	10	10	10
Charge voltage/V		58.4			
Operating voltage range/V		41.6~58.4			
Max. charge current/A		50	100	150	200
Max. discharge current/A		100	200	200	200
Operating temperature/°C	Charge temperature/°C	0~55			
	Discharge temperature/°C	-20~55			
Weight/kg		46	92	138	184
Dimension(W×D×H)(mm)		483×450×153	483×450×306	483×450×459	483×450×612
IP rating		IP21			
Certification		UN38.3, CE-EMC			
Cooling method		Natural cooling			
Communication		CAN/RS485, Bluetooth+APP			
Cycle life		≥6000 Cycles@0.5C/90%DOD@70%EOL, 25±2°C			
Display configuration		ON/OFF button, SOC indicator light(button LCD optional)			

51.2V 102AH Stacked LiFePO4 Battery



- Modular independent battery packs, support free vertical stacking expansion
- Uniform single-pack capacity, flexible capacity adjustment, easy to upgrade later
- Built-in independent BMS, automatic parallel communication between packs, no extra controller required
- Single pack fault can be replaced separately without affecting overall operation, easy maintenance

MODEL		S5-54						
Model type		EFP48100R						
Cathode material		LiFePO4						
Rated voltage/V		51.2						
Cell capacity/Ah		102						
Rated energy/kWh		5.22	10.44		15.67		20.89	
Standard parallel unit/P		1	2		3		4	
Output power/kW		5	5	10	5	10	5	10
Charge voltage/V		58.4						
Operating voltage range/V		41.6~58.4						
Max. charge current/A		50	100		120	150	120	200
Max. discharge current/A		100	120	200	120	200	120	200
Operating temperature/°C	Charge temperature/°C	0~55						
	Discharge temperature/°C	-20~55						
Weight/kg		11+50×1		11+50×2		11+50×3		11+50×4
Dimension(W×D×H)(mm)		580×390×380		580×390×560		580×390×740		580×390×920
IP rating		IP54						
Certification		UN38.3, CE-EMC						
Cooling method		Natural cooling						
Communication		CAN/RS485, Bluetooth+APP						
Cycle life		≥6000 Cycles@0.5C/90%DOD@70%EOL, 25±2°C						
Display configuration		Quick-connect terminal, ON/OFF button, SOC indicator light						

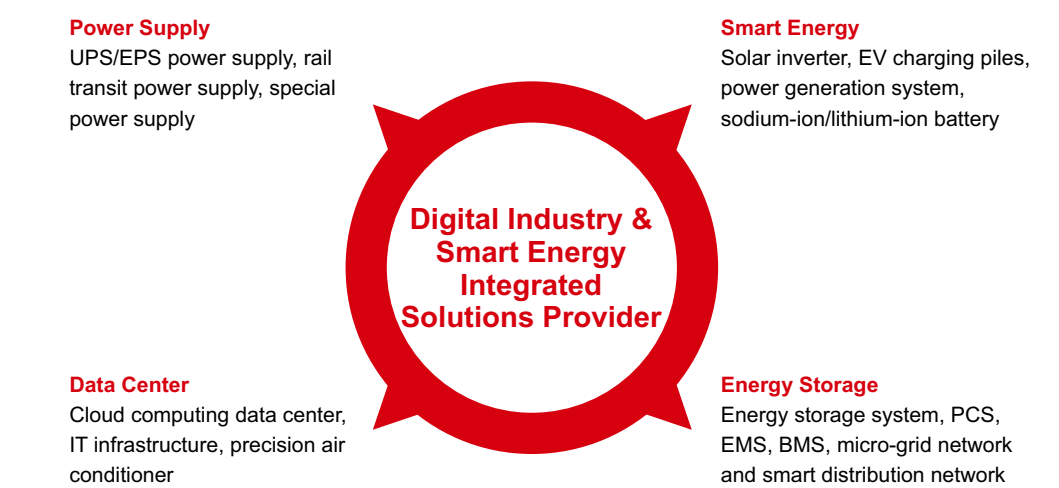
51.2V Wall-mounted/Floor-mounted Battery



- Ultra-thin wall-mounted design, saves floor space, wall installation
- Integrated design, beautiful and concise appearance, suitable for indoor home environment
- High safety, dustproof and moisture-proof, suitable for indoor household use
- Optional wheels easy to move and carry, suitable for garages and balconies

MODEL	WF5	WF10	WF16
Cathode material	LiFePO4		
Rated voltage/V	51.2	51.2	51.2
Cell capacity/Ah	100	206	314
Rated energy/kWh	5.12	10.55	16.07
Standard parallel unit/P	1	1	1
Output power/kW	5	10	8
Charge voltage/V	58.4	58.4	58.4
Operating voltage range/V	41.6~58.4	41.6~58.4	41.6~58.4
Max. charge current/A	100	100	160
Max. discharge current/A	100	200	200
Operating temperature/°C	0~55		
	-20~55		
Weight/kg	56	101	125/116
Dimension(W×D×H)(mm)	440×200×725 (785 with wheels)	470×235×765 (825 with wheels)	480×230×895 (955 with wheels)
IP rating	IP65/IP21		
Certification	UN38.3, CE-EMC		
Cooling method	Natural cooling		
Communication	CAN/RS485		
Cycle life	≥4000 Cycles@0.5C/90%DOD@ 80%EOL, 25±2°C	≥6000 Cycles@0.5C/90%DOD@ 80%EOL, 25±2°C	≥8000 Cycles@0.5C/90%DOD@ 80%EOL, 25±2°C
Display configuration	ON/OFF button, LCD touchscreen		

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