

APstorage (NA)

ELS-5K/3K&BATTERY

ACCESSORIES

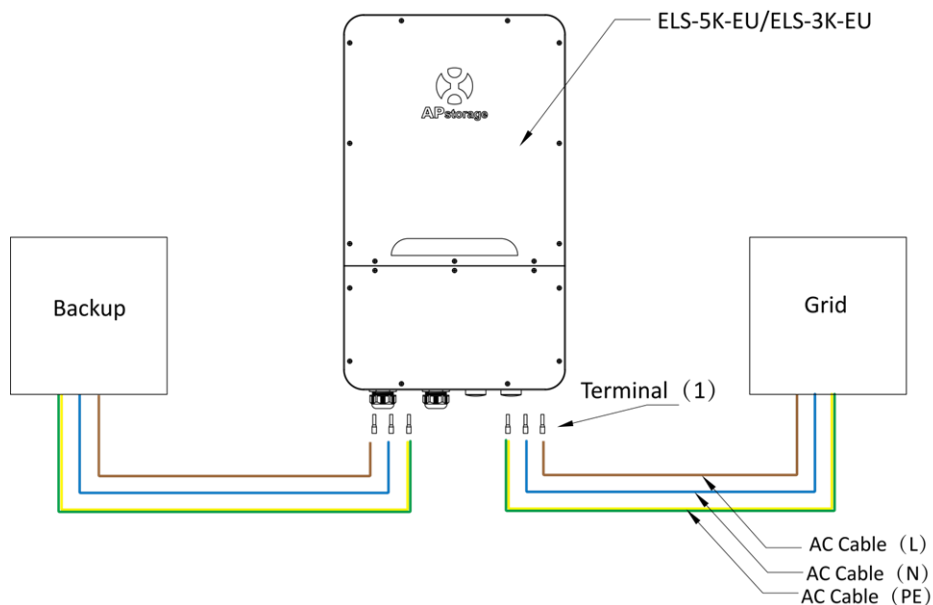
REV1.0 2025-01-20

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1. ELS Connects to Grid/Backup

1.1 Wiring Diagram with Grid/Backup



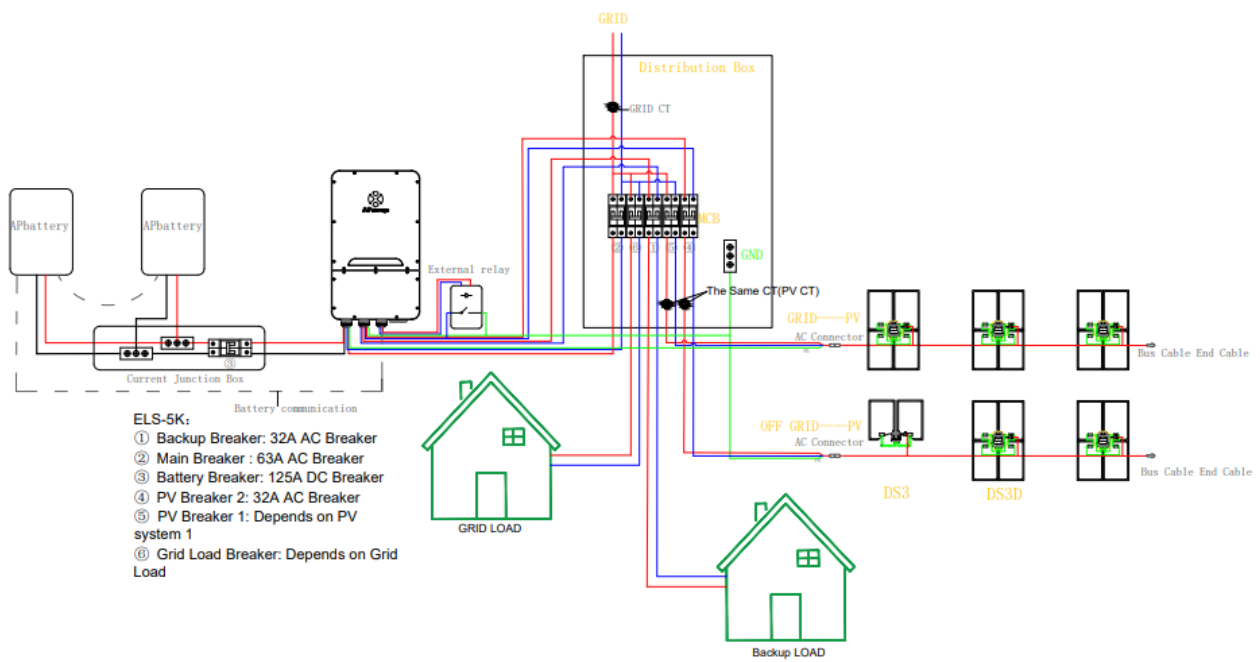
ELS-3K/5K Standard Configuration:

PCS	Wall-mounted Bracket	Expansion screw (M8*70)	Fixing screw (M6×14)	CT(current transformer)	Quick Installation Guide
					

Optional Configuration:

Category	Terminal (1)	AC Cable (L1)	AC Cable (L2)	AC Cable (N)	AC Cable (PE)
Part No. information	2385140008_Terminal (E10-18)	AC Cable(105℃ 600V 8AWG Black)	AC Cable(105℃ 600V 8AWG Red)	AC Cable(105℃ 600V 8AWG White)	AC Cable(105℃ 600V 8AWG Green)
Picture					
Single system consumption	6	Deliver in rolls and cut the required length by customer			

Category	Backup Breaker	Main Breaker	PV Breaker 2	PV Breaker 1	Grid Load Breaker
Part No. information	30A AC Breaker	60A AC Breaker	30A AC Breaker	Depends on PV system 1	Depends on Grid Load
Picture					
Single system consumption	1	1	1	1	1

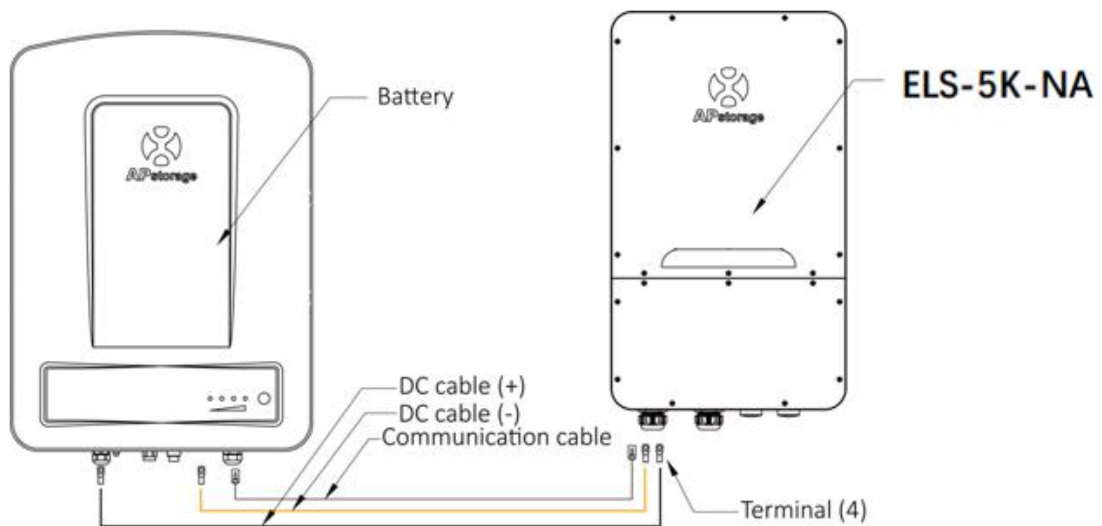


ELS-5K Optical Storage - On-Grid + Off-grid

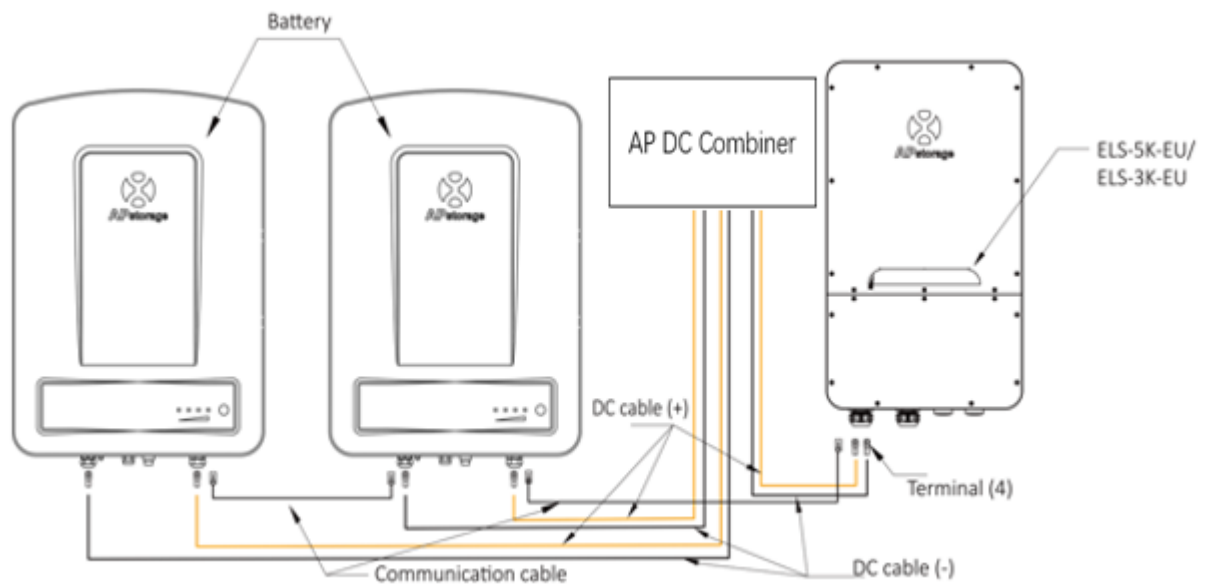
2. ELS Connects to Battery

2.1 APstorage Battery Series Accessories (APbattery-48V-5.76KWh)

2.1.1 Wiring Diagram with Apstorage Battery (Single unit), outdoor usage (IP65)



2.1.2 Wiring Diagram with Apstorage Battery (Parallel Connection), outdoor usage (IP65)



Product optional configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Power Cable	1 set	Connect battery to Breakers; 2M; Positive and negative; Omegor,UL3820,AWG3, Tinned copper wire, Black and red		Self - Contained
Communication cable	1 pcs	Connect battery to PCS; CAN or RS485 communicate; 2M; only pins 7 and 8 are to be used;		The Battery comes with it
2031515016- DC Cable	/	Connect PCS to Breakers; UL3820,AWG3; Orange and Black;		APSTORAGE
DC Breakers	1 pcs	Battery Breaker: 125A DC Breaker		Self - Contained
2381230008 -Round terminals	10 pcs	Connect Cables with Empty openings(TL35-8)		APSTORAGE
Terminals	1 pcs	Guaranteed communication-120Ω		Self - Contained
AP DC Combiner	1 pcs	460x435x225mm Batteries are connected in parallel		PCS-provides

NOTE:

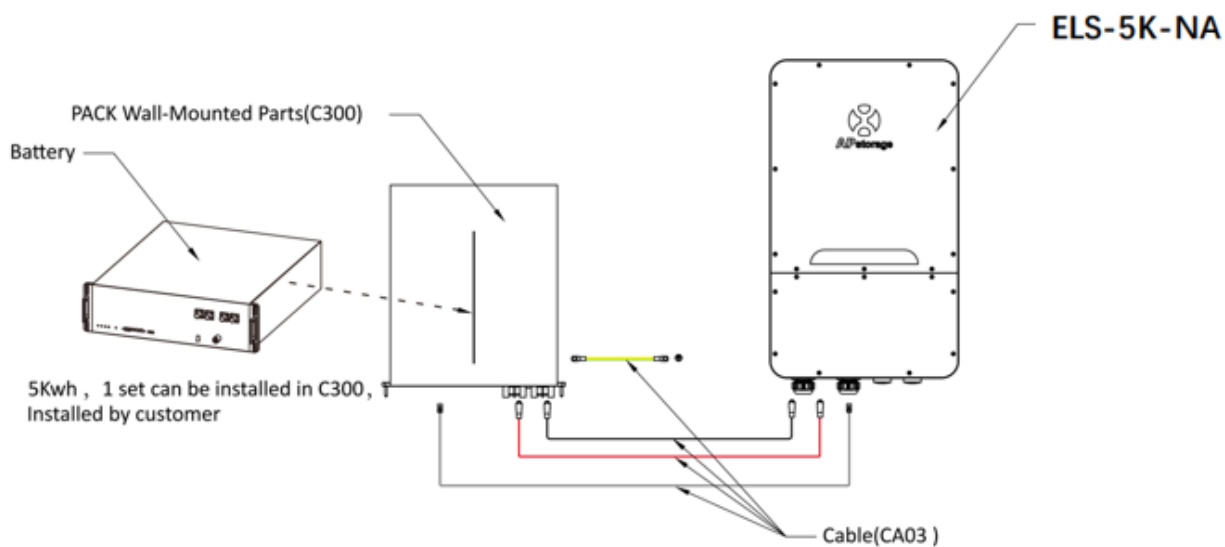
[1] IF APstorage Battery -U-48V-5.76KWh battery is used, a circuit breaker must be used;

[2] Delivered in rolls and cut to the desired length according to the customer;

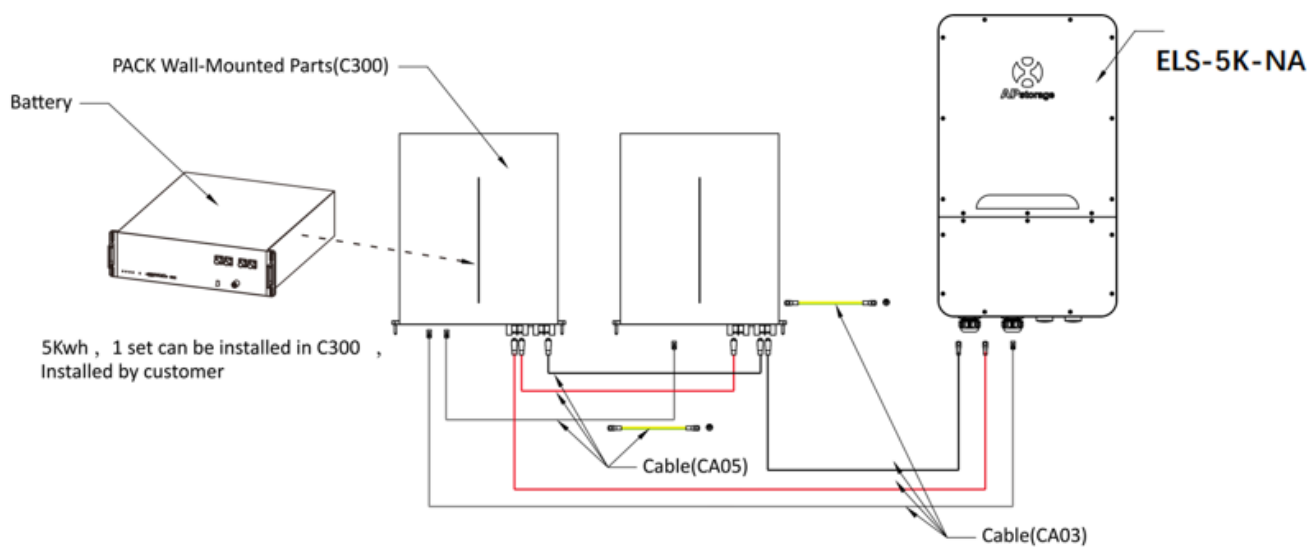
[3] THE APstorage Battery Communication cable only pins 7 and 8 are to be used

2.2 UZ Battery Series Accessories(UZ Power Lite Series L051100-B UZ PLPA-L1-10K2)

2.2.1 Wiring Diagram with C300 (Single unit), indoor usage (IP20)



2.2.2 Wiring Diagram with C300(Parallel Connection), indoor usage (IP20)



Product Standard Configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Communication cable	1 pcs	Connect battery to PCS; CAN or RS485 communicate; 2M;		The Battery comes with it
Power Cable	1 set	Connect battery to Breakers; 2M; Positive and negative; Omegor,UL3820,AWG3, Tinned copper wire, Black and red		The Battery comes with it
Ground Cable	1 pcs	RJ45 Plug Yellow-Green-L1m-Dual OT M6		The Battery comes with it

Product optional configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
2031515016- DC Cable	/	Connect PCS to Breakers; UL3820,AWG3; Orange and Black;		APSTORAGE
2381230008 -Round terminals	10 pcs	Connect Cables with Empty openings(TL35-8)		APSTORAGE
DC Breakers	1 pcs	Battery Breaker: 125A DC Breaker(When the cable is more than two meters)		Self - Contained

NOTE:

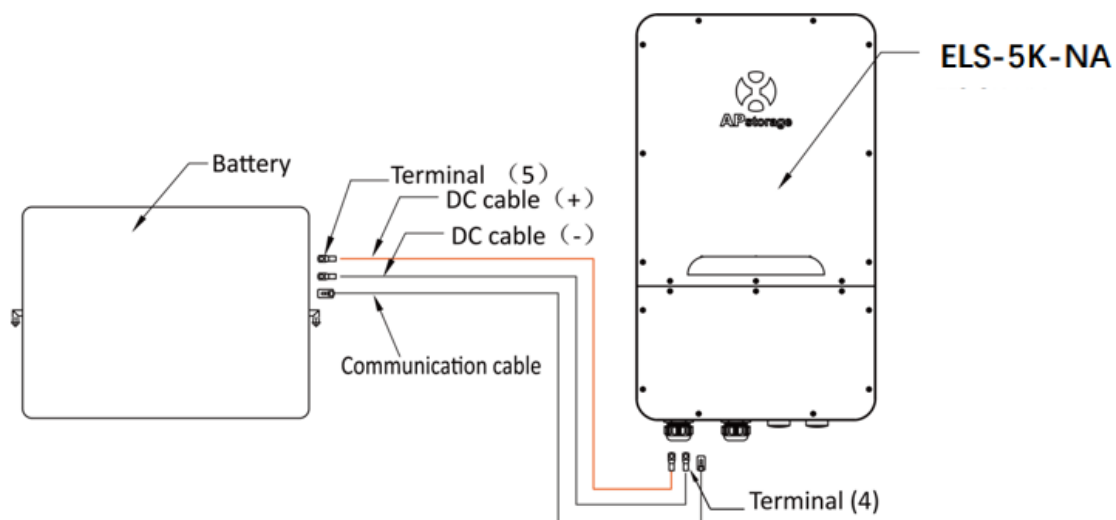
[1] IF the cable distance between the battery and the PCS is more than 2M, A DC breaker is required.

[2] Delivered in rolls and cut to the desired length according to the customer.

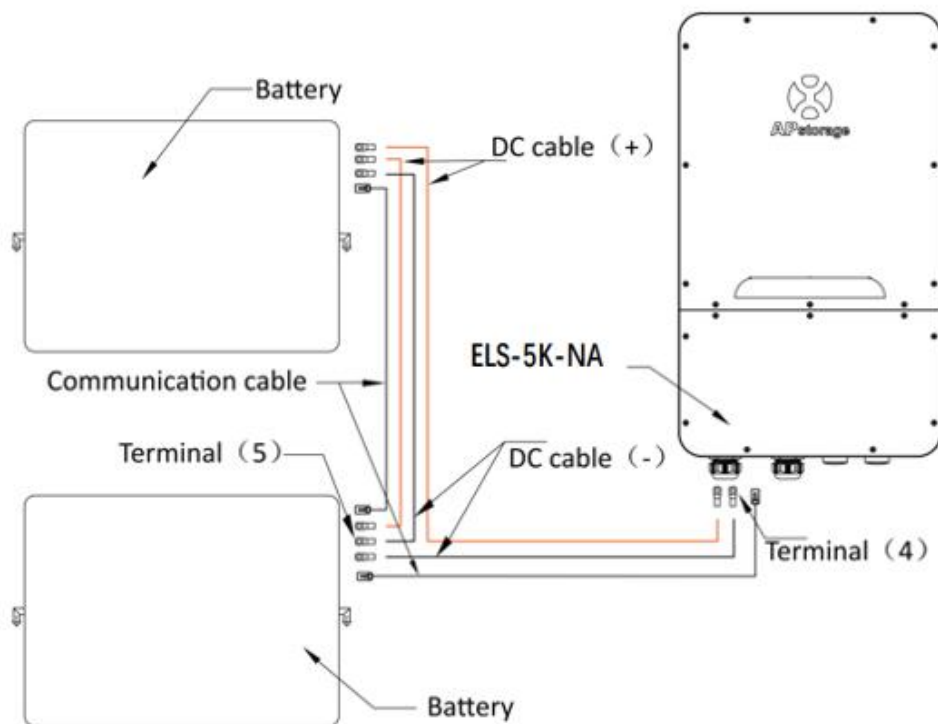
[3] UZ Power Lite Series L051100-B only compatible with ELS-5K models

2.3 Soluna Battery Series Accessories(Soluna EOS 5K Pack/10K Pack LV)

2.3.1 Wiring Diagram with Soluna Battery (Single unit), outdoor usage (IP54)



2.3.2 Wiring Diagram with Soluna Battery (Parallel Connection), outdoor usage (IP54)



Product Standard Configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Communication cable	1 pcs	Connect battery to PCS; CAN or RS485 communicate; 2M; (This is all that is required for the 10K version)		The Battery comes with it
Communication cable	2 pcs	Connect battery to PCS; CAN or RS485 communicate; 0.5M;		The Battery comes with it

Product optional configuration

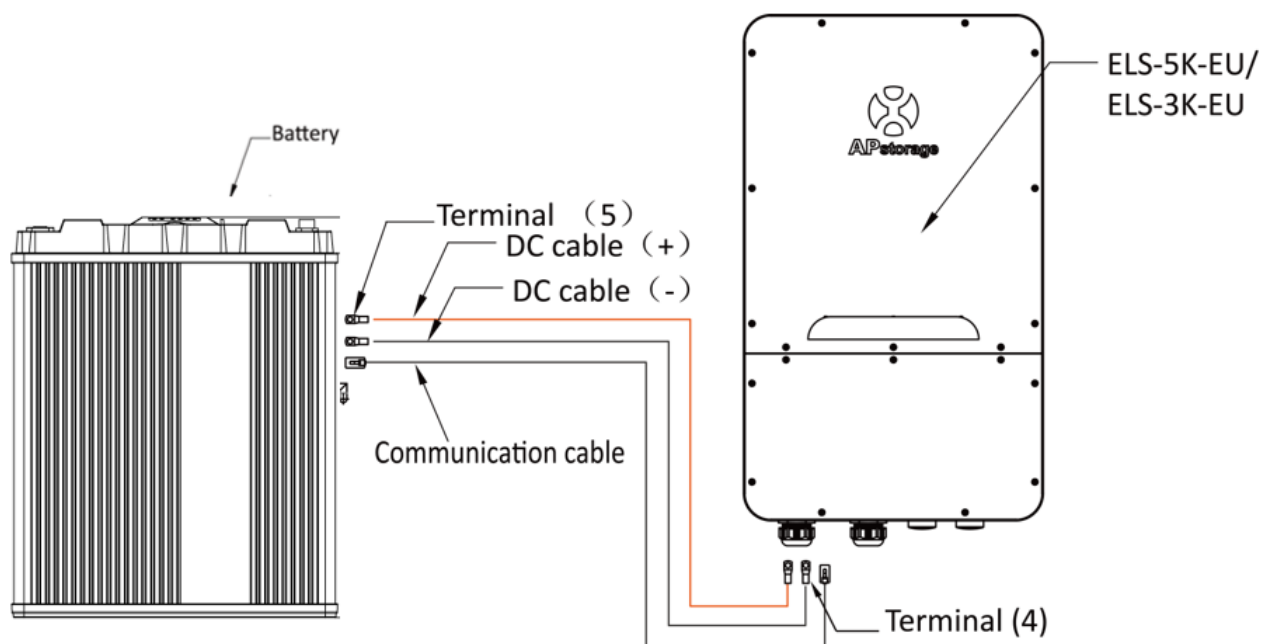
Items	Quantity(Single unit)	Specifications	Pictures	Provider
2031515016- DC Cable	/	Connect PCS to Breakers; UL3820,AWG3; Orange and Black;		APSTORAGE
DC Breakers	1 pcs	Battery Breaker: 125A DC Breaker		Self - Contained
2381230008 -Round terminals	10 pcs	Connect Cables with Empty openings(TL35-8)		APSTORAGE
Terminals	1 pcs	Guaranteed communication-120Ω		Self - Contained

NOTE:

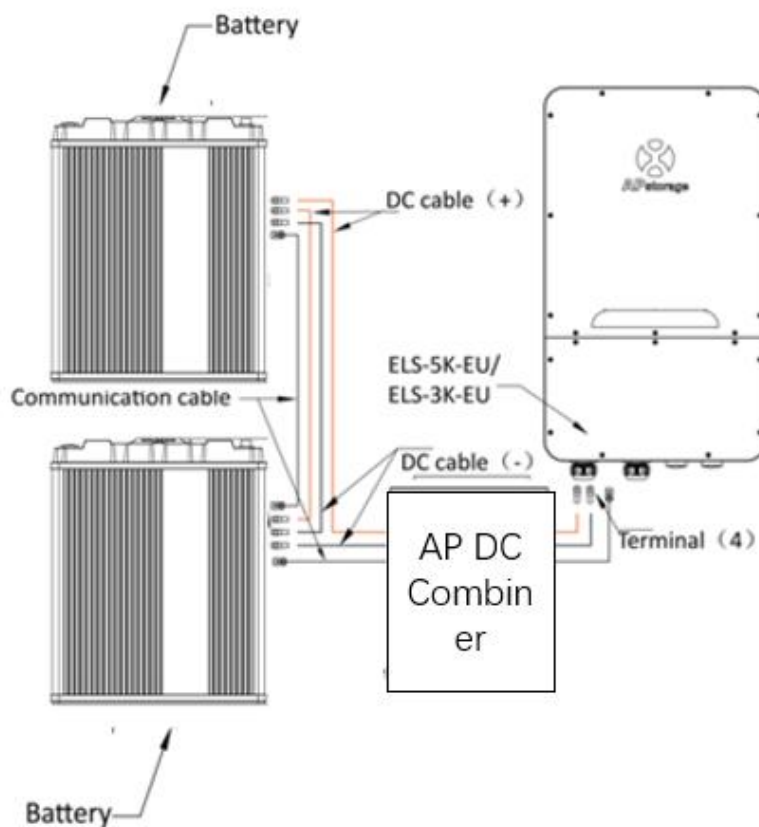
[1] Delivered in rolls and cut to the desired length according to the customer.

2.4 FORTRESS Battery Series Accessories(EFLEX 5.4)

2.4.1 Wiring Diagram with FORTRESS Battery (Single unit), outdoor usage (IP54)



2.4.2 Wiring Diagram with FORTRESS Battery (Parallel Connection), outdoor usage (IP54)



Product Standard Configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Communication cable	1 pcs	Connect battery to PCS; CAN or RS485 communicate; 2M;		The Battery comes with it

Product optional configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Power Cable	1 set	Connect battery to Breakers; 2M; Positive and negative; Omegor,UL3820,AWG3, Tinned copper wire, Black and red		Self - Contained
2031515016- DC Cable	/	Connect PCS to Breakers; UL3820,AWG3; Orange and Black;		APSTORAGE
DC Breakers	1 pcs	Battery Breaker: 125A DC Breaker(When the cable is more than two meters)		Self - Contained
2381230008 -Round terminals	10 pcs	Connect Cables with Empty openings(TL35-8)		APSTORAGE
AP DC Combiner	1 pcs	460x435x225mm Batteries are connected in parallel		PCS-provides

NOTE:

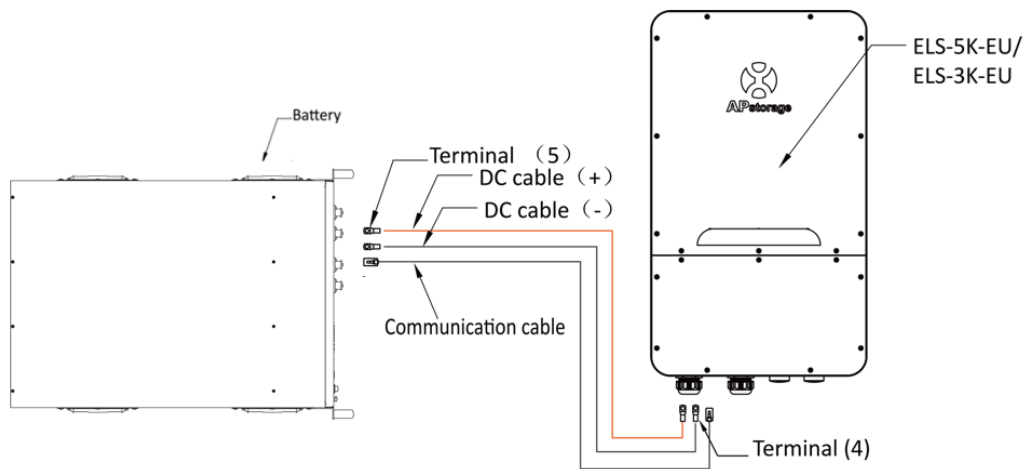
[1] IF the cable distance between the battery and the PCS is more than 2M, A DC breaker is required.

[2] Delivered in rolls and cut to the desired length according to the customer.

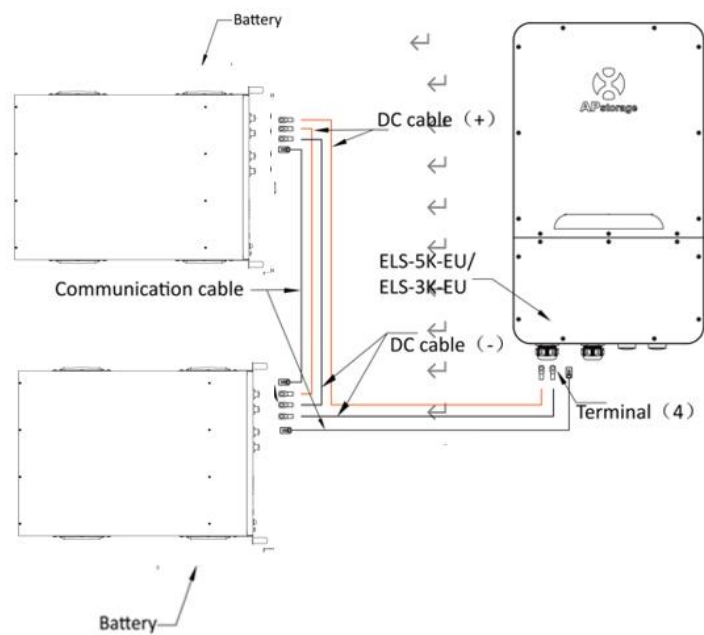
[3] The latest version of Fortress Battery is not compatible, if you need to purchase Fortress Battery to work with Yuneng's PCS, it is recommended to purchase the battery model described above

2.5 PYTES Battery Series Accessories(E-BOX-48100R)

2.5.1 Wiring Diagram with PYHES Battery (Single unit), outdoor usage (IP54)



2.5.2 Wiring Diagram with PYHES Battery (Parallel Connection), outdoor usage (IP54)



Product Standard Configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Communication cable	1 pcs	Connect battery to PCS; CAN or RS485 communicate; 2M;		The Battery comes with it
Power Cable	1 set	Connect battery to Breakers; 2M; Positive and negative; Omegor,UL3820,AWG3, Tinned copper wire, Black and red		The Battery comes with it
Ground Cable	1 pcs	RJ45 Plug Yellow-Green-L1m-Dual OT M6		The Battery comes with it

Product optional configuration

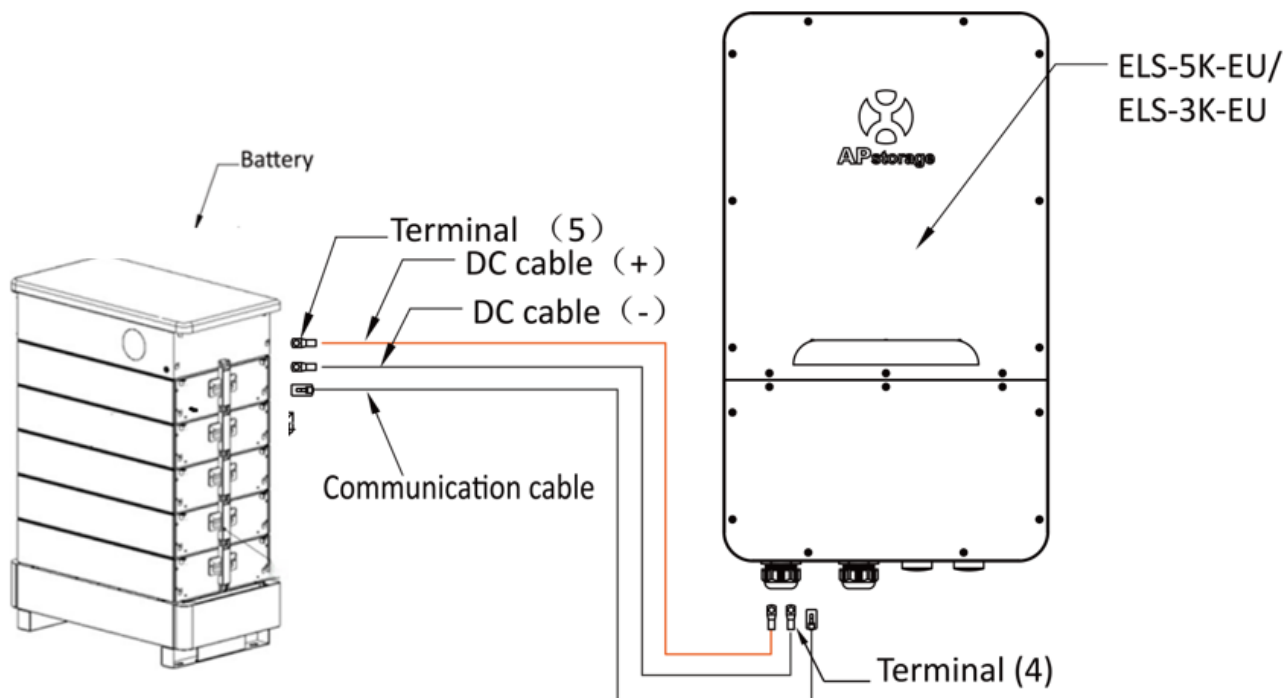
Items	Quantity(Single unit)	Specifications	Pictures	Provider
2031515016- DC Cable	/	Connect PCS to Breakers; UL3820,AWG3; Orange and Black;		APSTORAGE
DC Breakers	1 pcs	Battery Breaker: 125A DC Breaker		Self - Contained
2381230008 -Round terminals	10 pcs	Connect Cables with Empty openings(TL35-8)		APSTORAGE

NOTE:

[1] Delivered in rolls and cut to the desired length according to the customer.

2.6 HOMEGRID Battery Series Accessories(PF5-LFP04800/ LFP09600/ LFP14400/ LFP19200/ LFP24000/ LFP28800/ LFP33600/ LFP38400-2A01)

2.6.1 Wiring Diagram with HOMEGRID Battery (Single unit), outdoor usage (IP54)



Product Standard Configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Communication cable	1 pcs	Connect battery to PCS; CAN or RS485 communicate; 2M;		The Battery comes with it
Power Cable	1 set	Connect battery to Breakers; 2M; Positive and negative; Omegor,UL3820,AWG3, Tinned copper wire, Black and red		The Battery comes with it
Ground Cable	1 pcs	RJ45 Plug Yellow-Green-L1m-Dual OT M6		The Battery comes with it

Product optional configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
2031515016-DC Cable	/	Connect PCS to Breakers; UL3820,AWG3; Orange and Black;		APSTORAGE
DC Breakers	1 pcs	Battery Breaker: 125A DC Breaker(When the cable is more than two meters)		Self - Contained
2381230008 -Round terminals	10 pcs	Connect Cables with Empty openings(TL35-8)		APSTORAGE

NOTE:

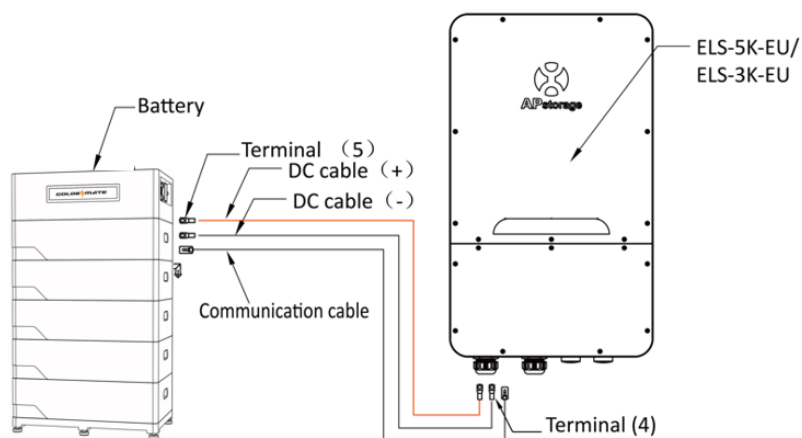
[1] IF the cable distance between the battery and the PCS is more than 2M, A DC breaker is required.

[2] Delivered in rolls and cut to the desired length according to the customer.

[3] Batteries are stacked and do not require additional cables to connect in parallel

2.7 GOLDENMATE Battery Series Accessories (APOLLO-6-LV/APOLLO-9-LV/APOLLO-12-LV/APOLLO-15-LV)

2.7.1 Wiring Diagram with GOLDENMATE Battery (Single unit), outdoor usage (IP54)



Product Standard Configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Communication cable	1 pcs	Connect battery to PCS; CAN or RS485 communicate; 2M;		The Battery comes with it
Power Cable	1 set	Connect battery to Breakers; 2M; Positive and negative; Omegor,UL3820,AWG3, Tinned copper wire, Black and red		The Battery comes with it
Ground Cable	1 pcs	RJ45 Plug; Yellow-Green-L1m-Dual OT M6;		The Battery comes with it

Product optional configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
2031515016- DC Cable	/	Connect PCS to Breakers; UL3820,AWG3; Orange and Black;		APSTORAGE
DC Breakers	1 pcs	Battery Breaker: 125A DC Breaker(When the cable is more than two meters)		Self - Contained
2381230008 -Round terminals	10 pcs	Connect Cables with Empty openings(TL35-8)		APSTORAGE

NOTE:

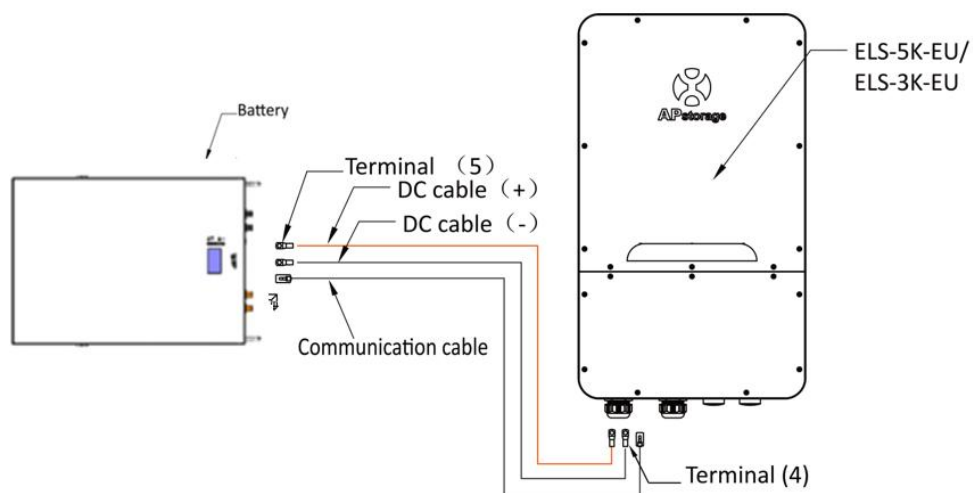
[1] IF the cable distance between the battery and the PCS is more than 2M, A DC breaker is required.

[2] Delivered in rolls and cut to the desired length according to the customer

[3] Batteries are stacked and do not require additional cables to connect in parallel

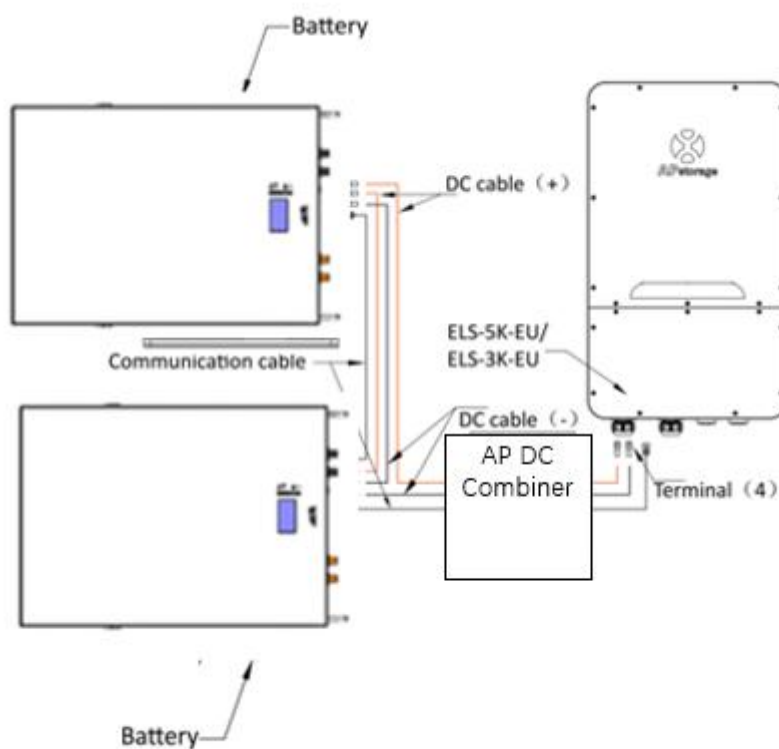
2.8 **GSL Battery** Series Accessories(GSL-051280A-B-GBP2)

2.8.1 Wiring Diagram with GSL Battery (Single unit), outdoor usage (IP54)



/

2.8.2 Wiring Diagram with GSL Battery (Parallel Connection), outdoor usage (IP54)



Product Standard Configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
Communication cable	1 pcs	Connect battery to PCS; CAN or RS485 communicate; 2M;		The Battery comes with it
Communication cable	1 pcs	Connect battery to battery; CAN or RS485 communicate; 0.5M;		For battery paralleling
Power Cable	1 set	Connect battery to Breakers; 2M; Positive and negative; Omegor,UL3820,AWG3, Tinned copper wire, Black and red		The Battery comes with it
Ground Cable	1 pcs	RJ45 Plug; Yellow-Green-L1m-Dual OT M6		The Battery comes with it

Product optional configuration

Items	Quantity(Single unit)	Specifications	Pictures	Provider
2031515016- DC Cable	/	Connect PCS to Breakers; 25mm ² ; Orange and Black;		APSTORAGE
DC Breakers	1 pcs	Battery Breaker: 125A DC Breaker		Self - Contained
2381230008 -Round terminals	10 pcs	Connect Cables with Empty openings(TL35-8)		APSTORAGE
AP DC Combiner	1 pcs	460x435x225mm Batteries are connected in parallel		PCS-provides

NOTE:

[1] IF the cable distance between the battery and the PCS is more than 2M, A DC breaker is required.

[2] Delivered in rolls and cut to the desired length according to the customer.

[3] Regarding the DC circuit breaker, when the battery itself comes with a circuit breaker, only when the cable length is more than two meters, another circuit breaker needs to be connected, if the battery itself does not have a circuit breaker, a circuit breaker must be installed.

Summarize:

- ① This quantity is the required quantity of a single machine, and the required quantity for parallel connection needs to be increased according to the number of parallel batteries.
- ② Whether the battery needs a DC Box depends on whether the output port of the battery has double the positive and negative terminals.
- ③ Introduction to DC Box

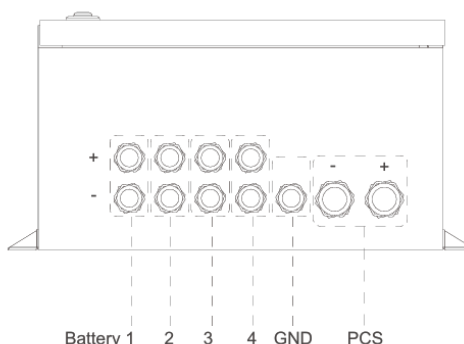
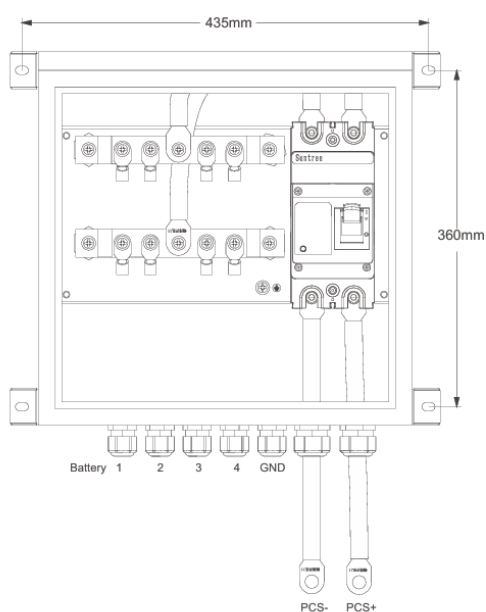
Datasheet | AP DC Combiner

General Specifications

Dimensions W/H/D	444mm x 433mm x 225mm
Weight	14.6kg
Operating Ambient Temperature	-25°C ~ +65°C
Storage Temperature Range	-40°C ~ +85°C
Environment category	Outdoor
Relative Humidity	10%-90%
Ingress Protection	IP65
Ventilation	Natural convection
Permissible Altitude	≤2000m
Warranty	5 years

DC Input/Output Data

Nominal DC voltage	51.2VDC
DC operating voltage range	40-60VDC
Max Continuous current	250A
DC cables length	1500mm



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