

aerl



AERL LiFe²

QUICK START GUIDE

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Safety

When installing, commissioning, operating, and maintaining the product, it is imperative to strictly adhere to the safety requirements outlined in the manual. Failure to follow these guidelines may result in damage to the product, property, or injury, or even death of the operator or others. When securing the product with screws or other components, use the appropriate tools and apply the torque specified in the manual to prevent damage. Familiarize yourself with the tools before use to avoid injuries caused by improper handling. Thoroughly read the manual before installation to ensure the product is installed and used safely and correctly.

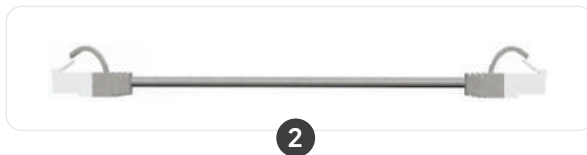
Important Information

- Installers and users are required to familiarize themselves with this manual.
- Power cables and plugs can carry high current from the battery; exercise caution when wiring.
- Ensure a fire extinguisher is readily available before installation and use.
- Installation and commissioning must be performed by qualified personnel.
- The battery system must be installed in an appropriate area.
- Due to the weight of the battery module, it is recommended that installation be carried out by at least two people.
- Use appropriate tools as necessary for installation.

Box Contents



#	Part	Qty
1	Termination Plug	1
2	Comms Cable	1
3	M6 x 16 Bolt	4



AERL LiFe2 Cabinets

Specification	LiFe2 Cabinet 6	LiFe2 Cabinet 10
Dimensions (W x D x H)	620 x 600 x 1270 mm	620 x 600 x 1890 mm
Max. Qty of Modules	6 (30kWh)	10 (50kWh)
Max. Continuous Current	625A	1250A
IP Rating	IP20	
Weight	90 kg	120 kg

Cabinet 10



Cabinet 6



Tools



Utility Knife



Insulated Gloves



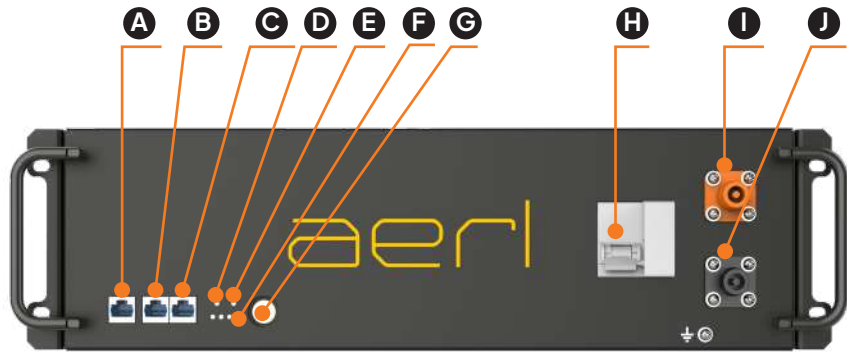
Goggles






Drill

Interface & Status LEDs

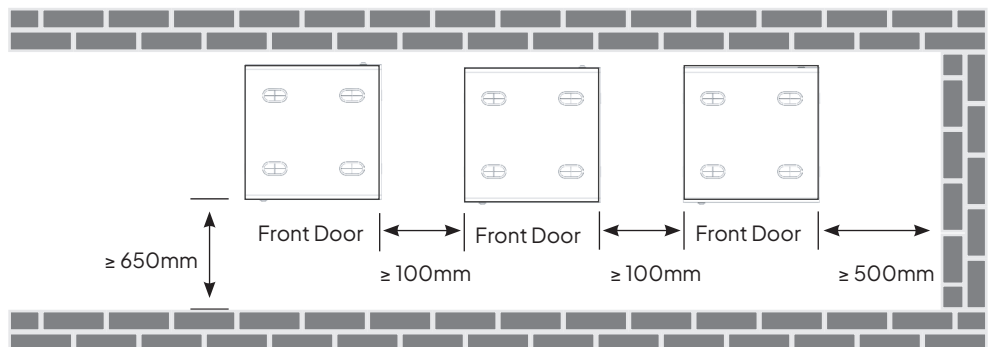
There are LEDs on the front panel of AERL LiFe2 that indicate the battery state (Status, Error, and SOC).



Letter	Label	Function	Letter	Label	Function
A	COMMS	Inverter Comms	F	N/A	SOC Indicator
B	OUT	Battery Comms Out	G	ON/OFF	On/Off Switch
C	IN	Battery Comms In	H	MCB	Circuit Breaker
D	N/A	Error Indication	I	+	DC+ Port
E	N/A	Battery Status	J	-	DC- Port

LED	Status	Description
Error	● (Red)	An error has occurred.
	● (Grey)	There are no active errors.
Status	● (Green)	The battery is active and can be charged and discharged.
	● (Grey)	The battery is not active.
SOC	● ● ● ● (Green)	75–100% SOC
	● ● ● ● (Green)	50–75% SOC
	● ● ● ● (Green)	25–50% SOC
	● ● ● ● (Green)	0–25% SOC
	If SOC < 10%, the first LED will flash quickly (1s ON, then 1s OFF)  1Hz	
If SOC < 5%, the first LED will flash (0.5s ON, then 0.5s OFF)  0.5 Hz		
If charging, the last LED will flash slowly (2s ON, then 2s OFF)  0.25 Hz		

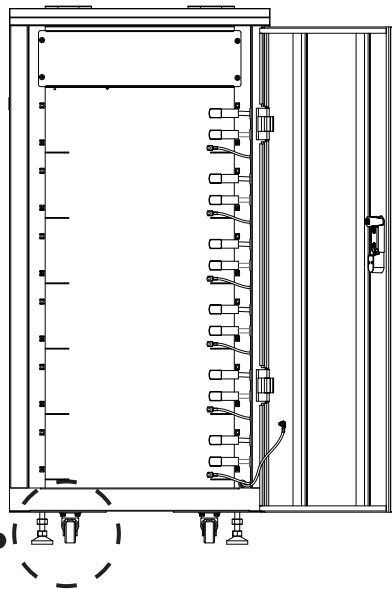
Minimum Clearance Requirements



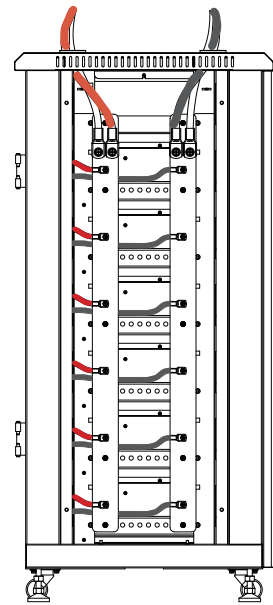
Connecting the Power Cables & deploying the Supporting Feet



Use the feet to support the cabinet, ensuring that the wheels are higher than feet before inserting batteries.

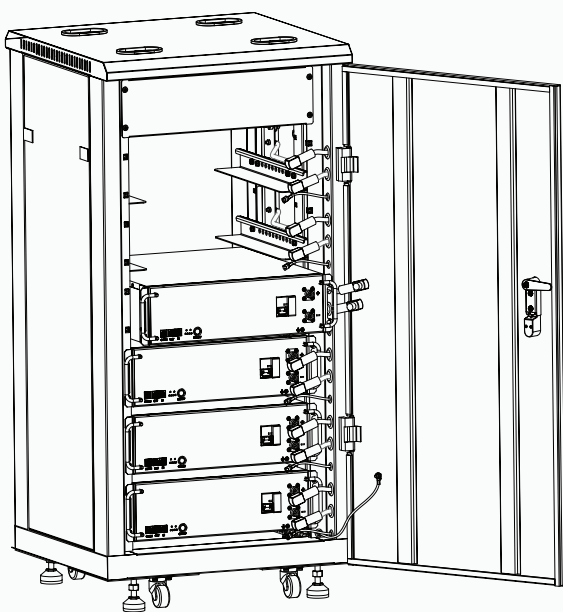


Right Side

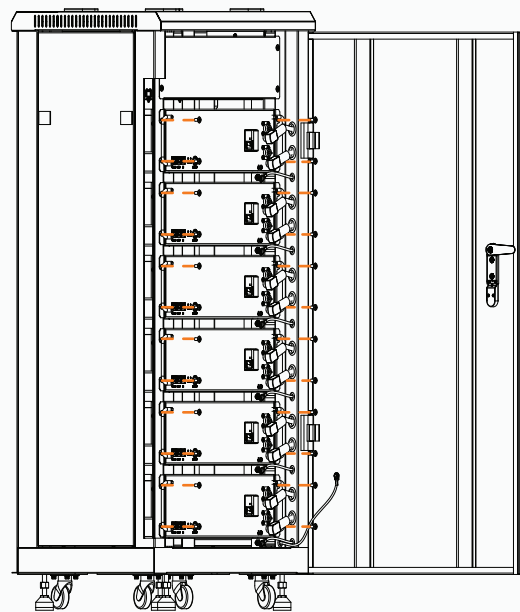


Power Lug Torque: 15 N·m

Inserting and Fastening the Modules

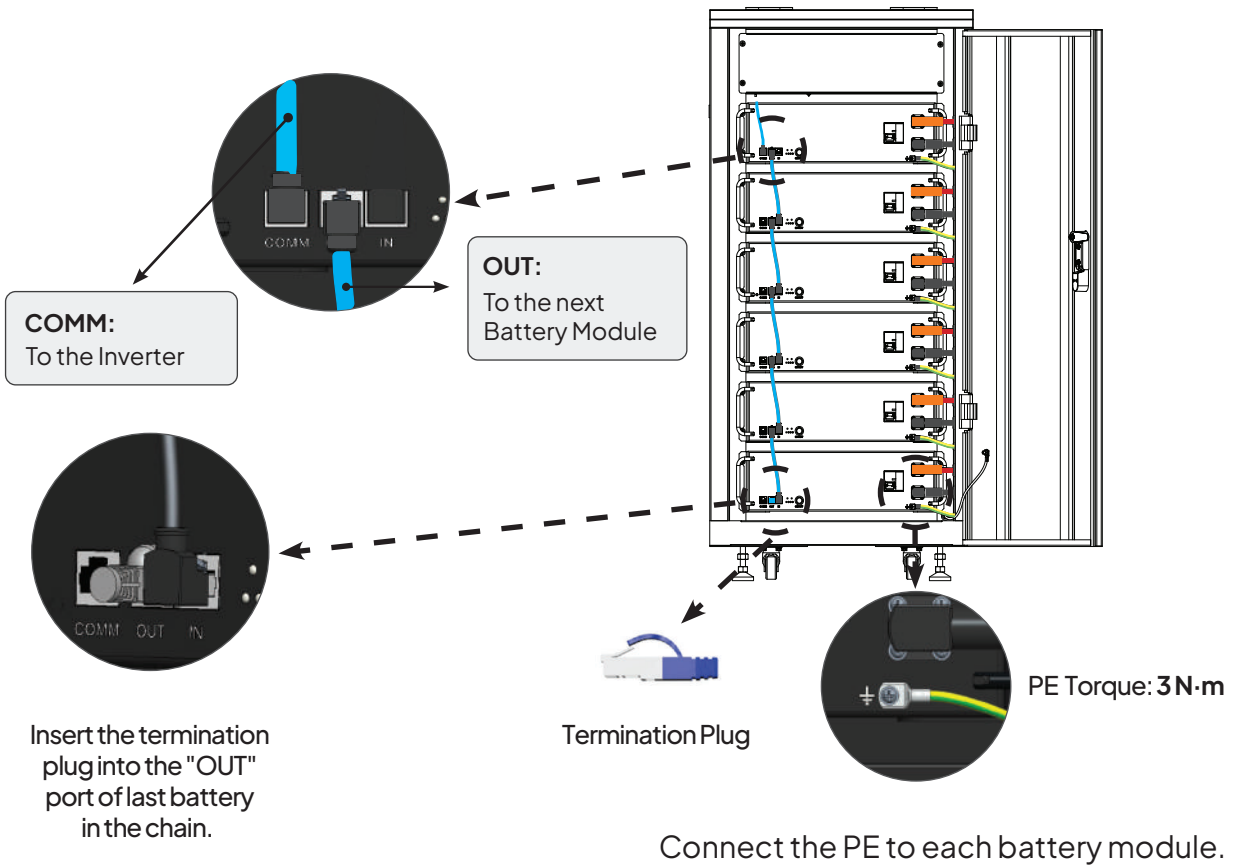


Insert the Modules into the Cabinet

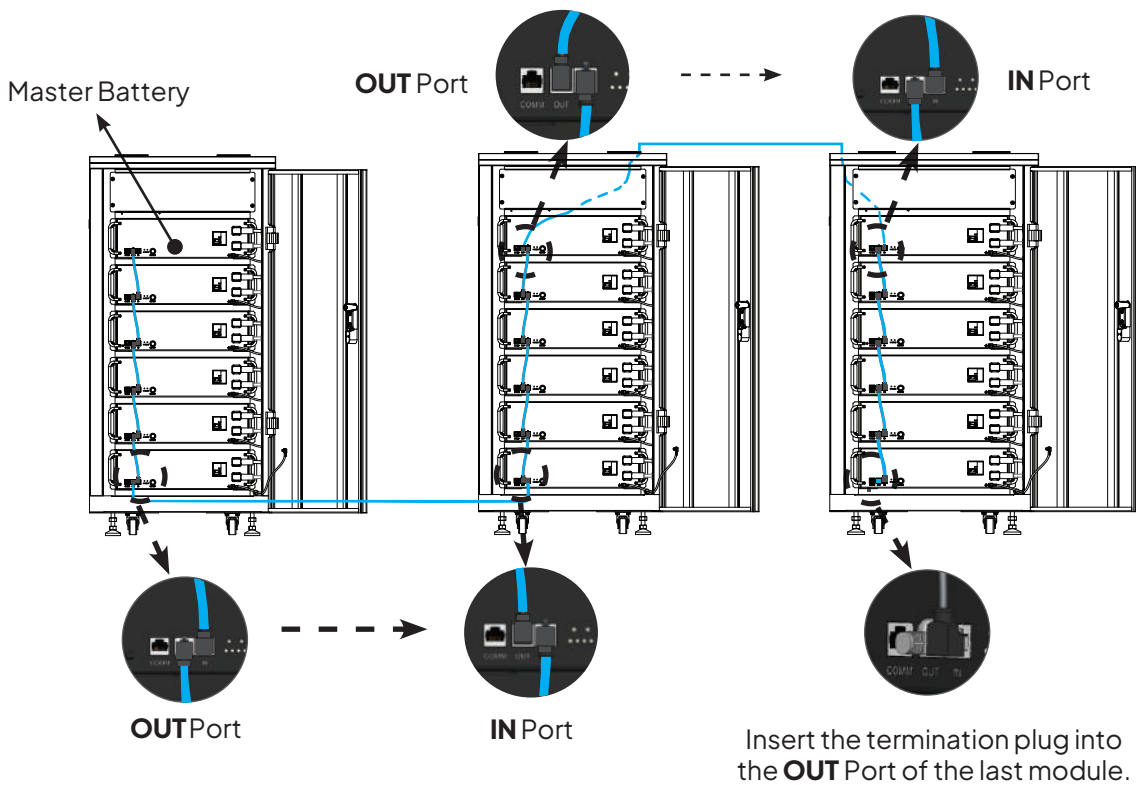


Module Bolt Torque: 3 N·m

Connecting the Comms & the Protective Earth



Connecting Parallel Cabinets

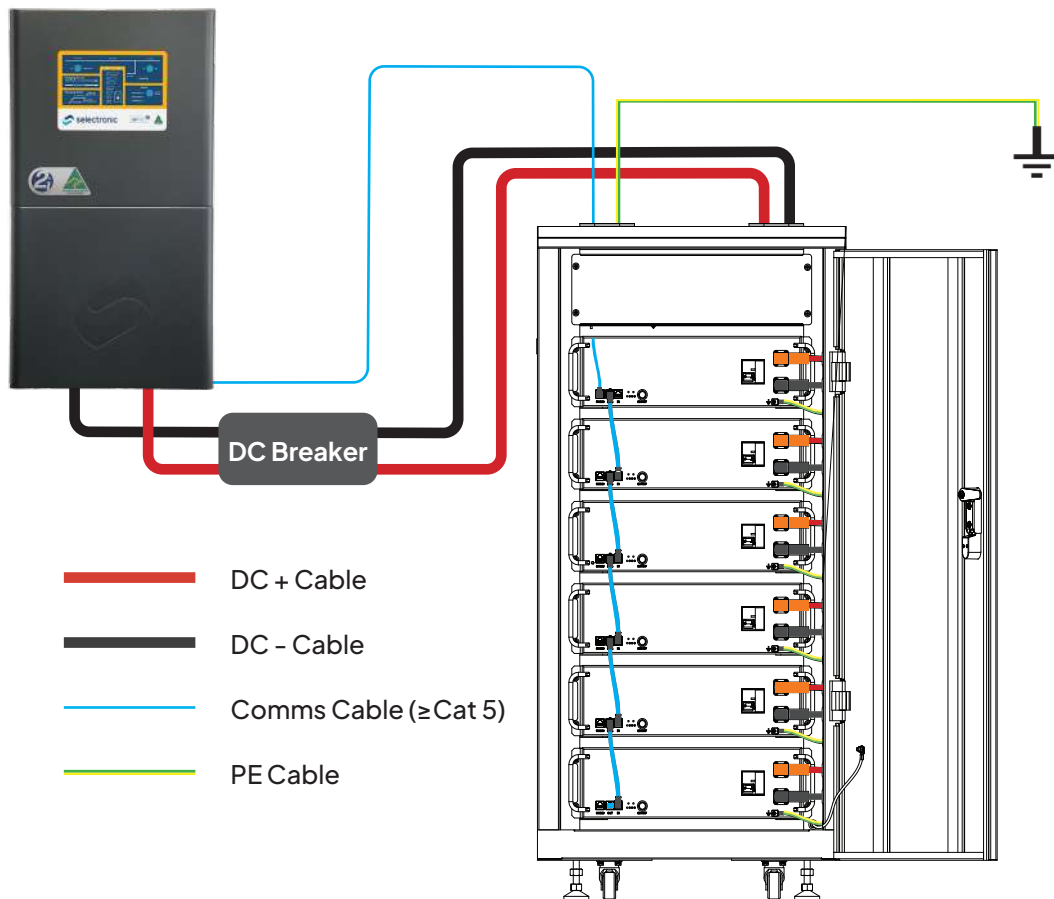


Connecting to the Inverter

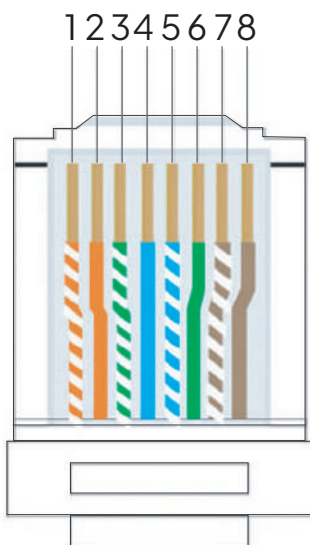
Connect the DC power cables and comms cable between Master Battery and the Inverter.

Important Note

- The comms cable should be Cat 5 or greater.



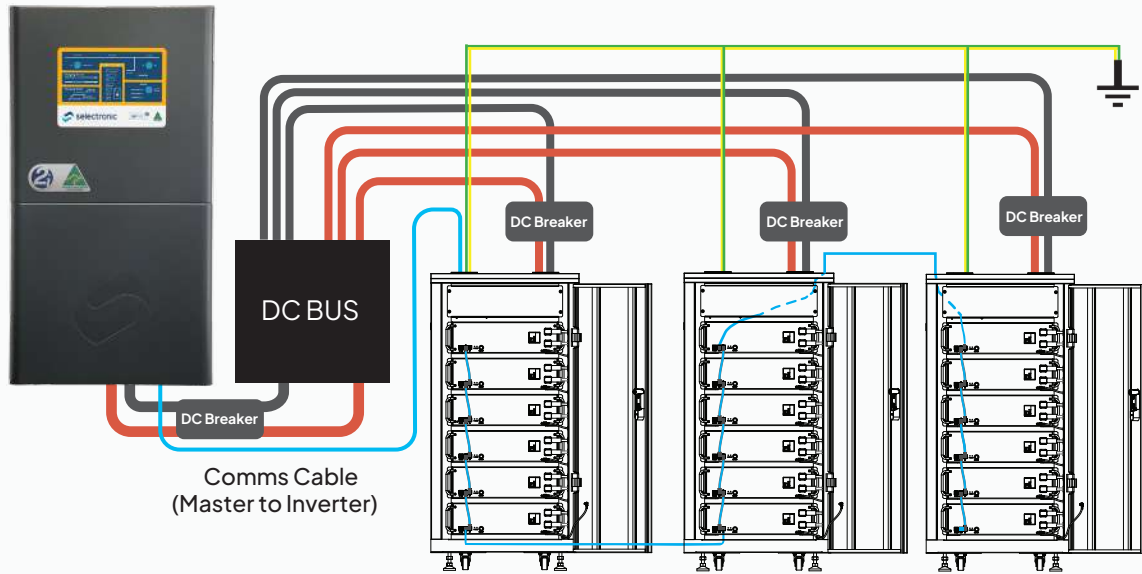
- DC + Cable
- DC - Cable
- Comms Cable (\geq Cat 5)
- PE Cable



Master Comms Port Pin-Out

PIN No.	1	2	3	4	5	6	7	8
Definition	NC	NC	NC	CAN_H	CAN_L	NC	RS485B	RS485A

Connecting Parallel Cabinets to the Inverter



Note:

- DC+ Cable —
- DC- Cable —
- COM Cable —
- PE Cable —

1. A maximum of 64 AERL LiFe2 modules can be connected in parallel.
2. A combiner box with an appropriately rated DC Bus is needed to combine the DC power cabling from the parallel cabinets.
3. DC power cable lengths for all the cabinets must be approximately equal.
4. The comms cable length between the Master and the Inverter should be ≤ 5 m.

Starting up or Shutting down the Battery System



ON / OFF

System Start Up

- 1:** Turn on the DC breakers between battery cabinet(s) and the Inverter.
- 2:** Turn on the battery module breakers.
- 3:** Press and Hold the 'ON/OFF' button on Master Battery to power up the system.

System Shutdown

- 1:** Turn OFF the AC Isolators (IN/OUT) on the Inverter.
- 2:** Turn OFF the PV Isolators on the Inverter.
- 3:** Turn OFF the DC Breaker between the battery cabinet(s) and the Inverter.
- 4:** Press and Hold the ON/OFF button for 3 seconds on the Master Battery to shut down the system.

Thank you for choosing AERL.

Your decision to trust our product means a lot to us.

At AERL, our focus is on technical excellence. Our batteries are the result of rigorous engineering and precise craftsmanship, and we have invested heavily in ensuring that each battery delivers outstanding performance and reliability.

We recognize the importance of dependable power in standalone applications, and we are committed to providing you with top-tier products that get the job done.

If you have any questions or need support, our team is always ready to assist.


Sincerely,


The AERL Team


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