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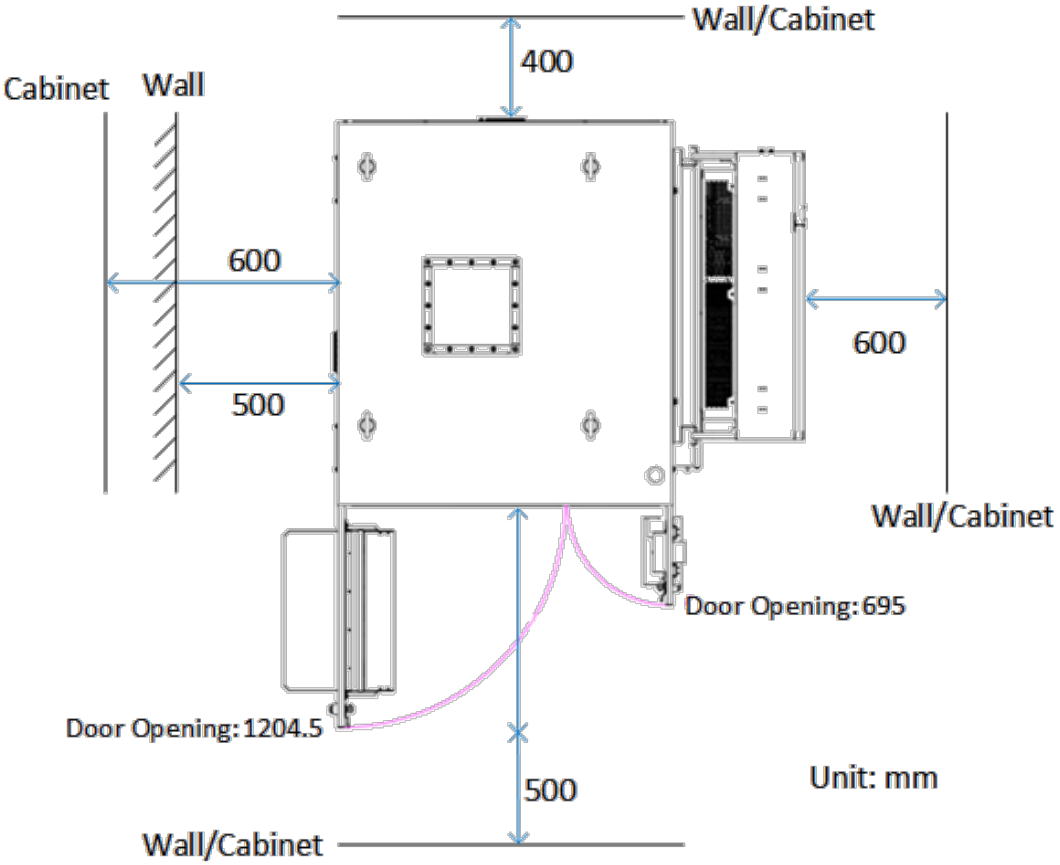
RI-ENERGYSET-3P-ESS-50-107
Installation Overview

Clearance Requirements

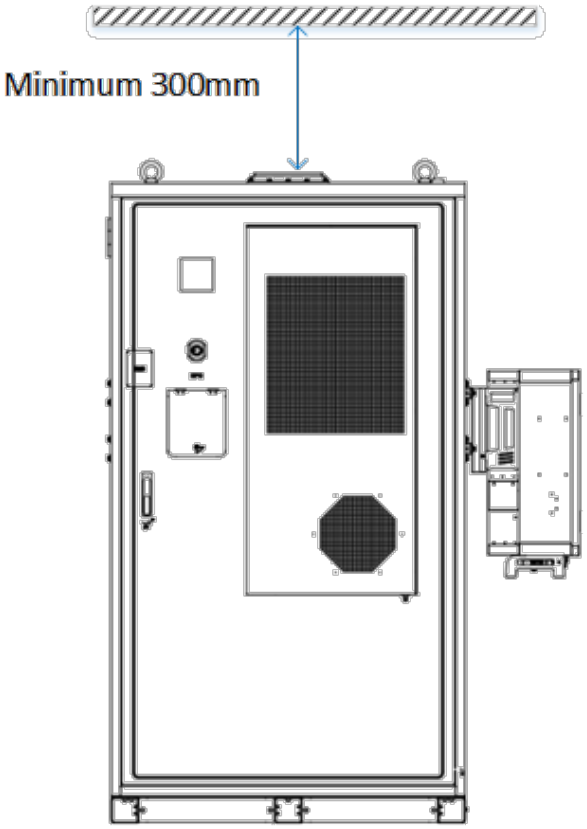
Top View

The depth of the RI-ENERGYFLOW-3P-HYBRID-50B Inverter is 409mm



Front View

The minimum distance between the battery cabinet and the ceiling is 300mm



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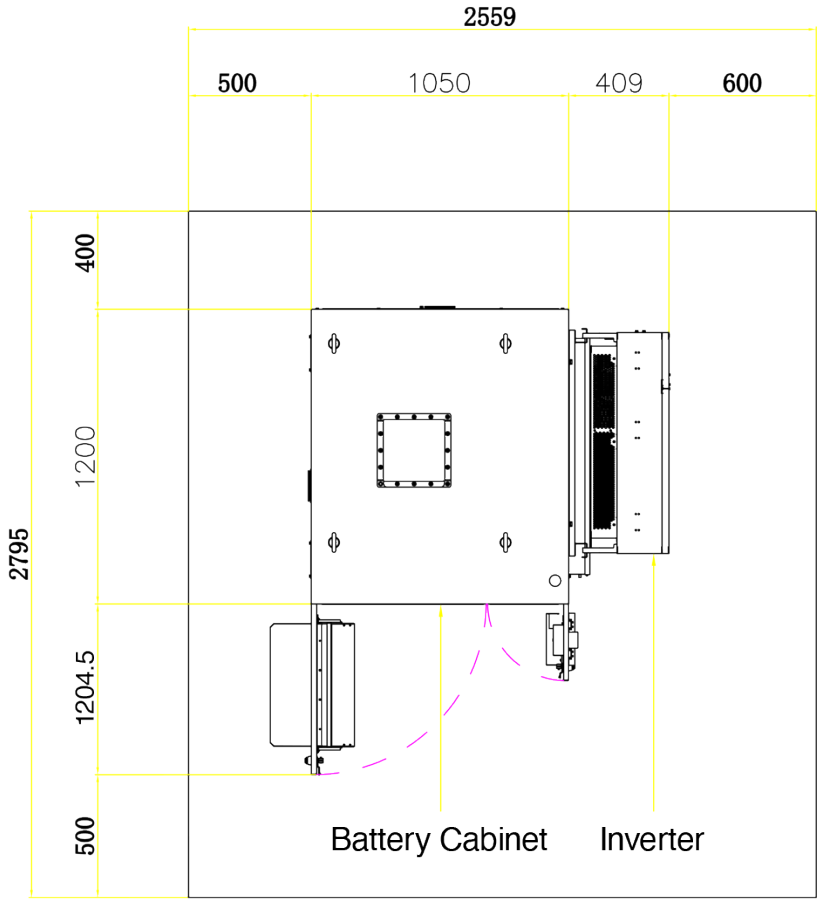
Basic Configurations

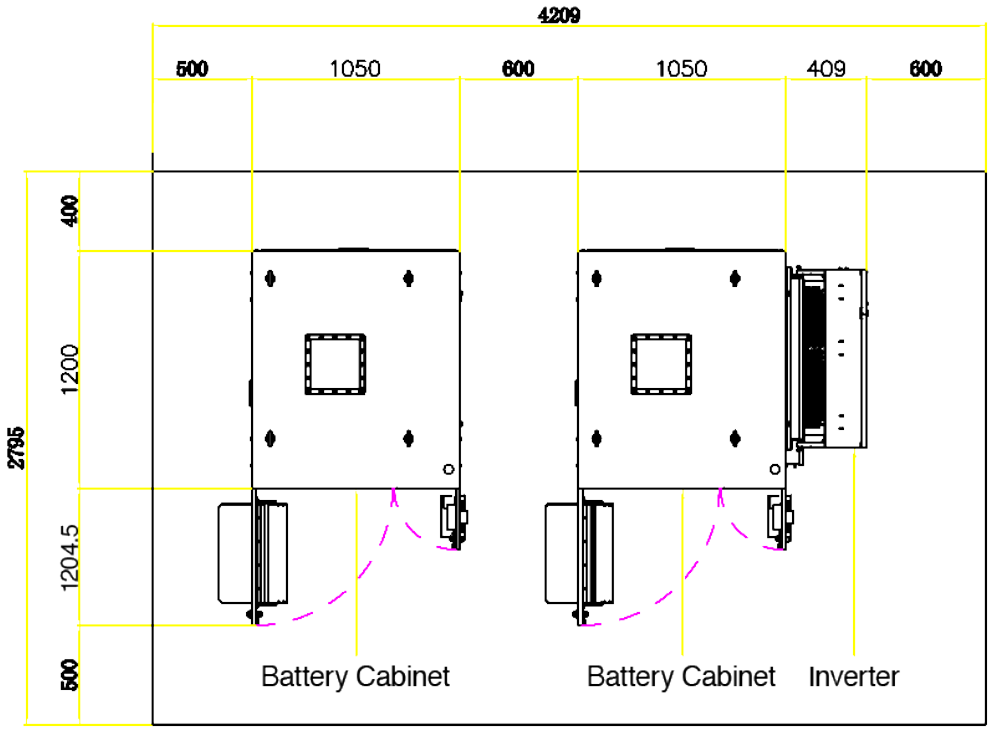
Single EnergySet

NOTE: These configurations show the minimum distances for protective fencing and minimum proximity of any other equipment.

See next section for Base Requirements and Recommendations.



Single EnergySets with additional Battery Cabinets



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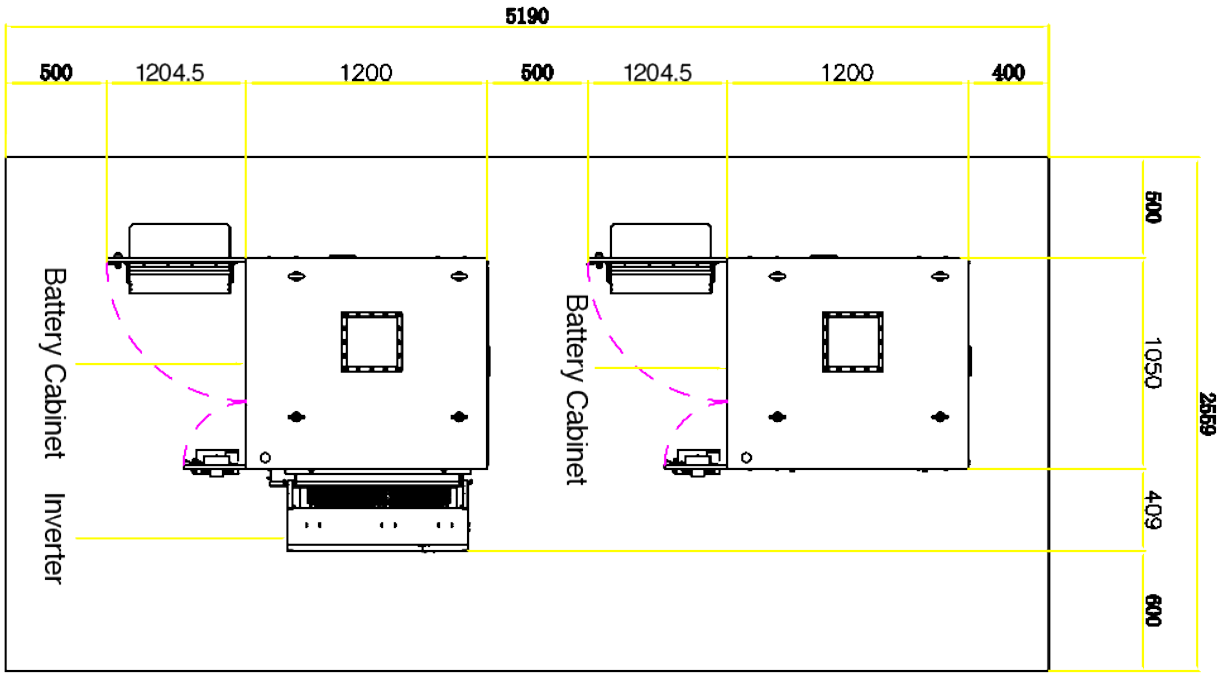

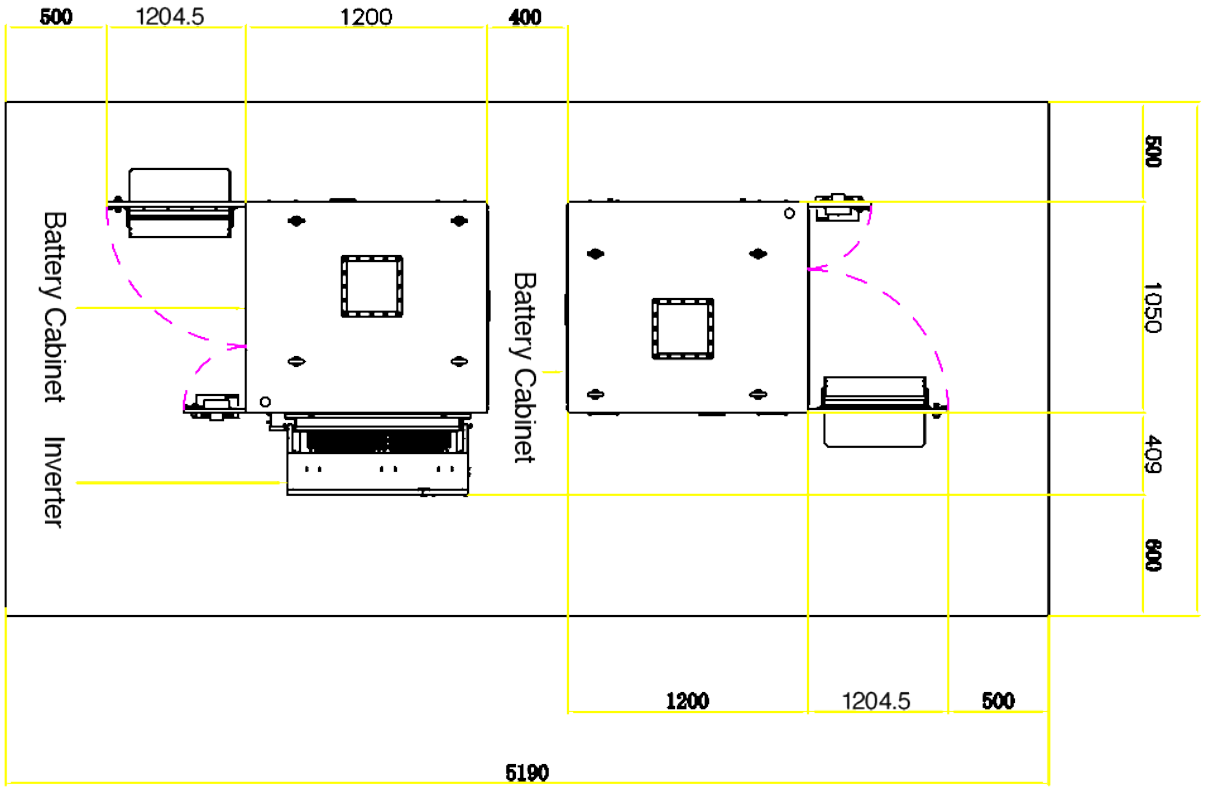

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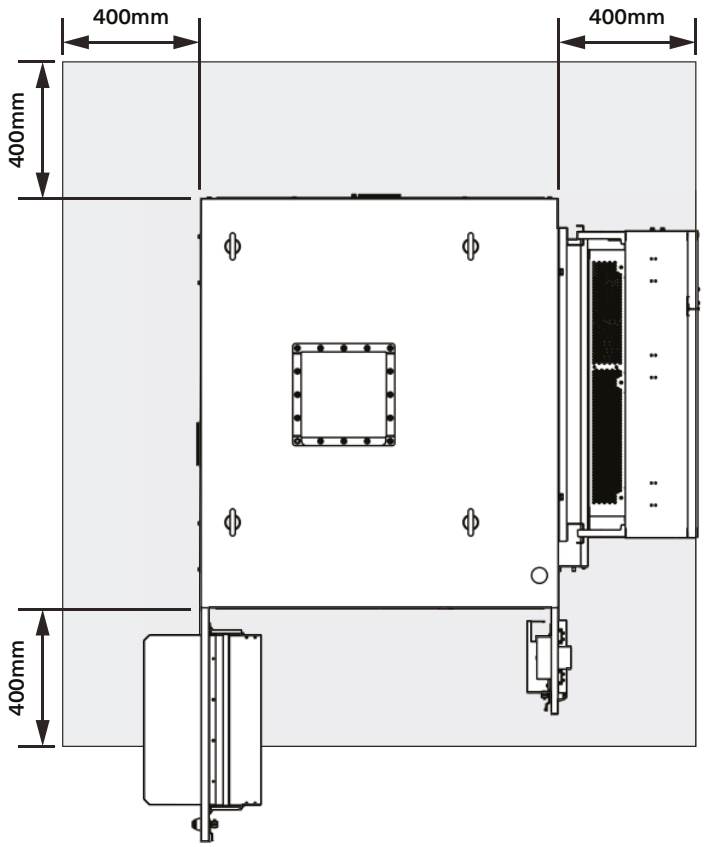
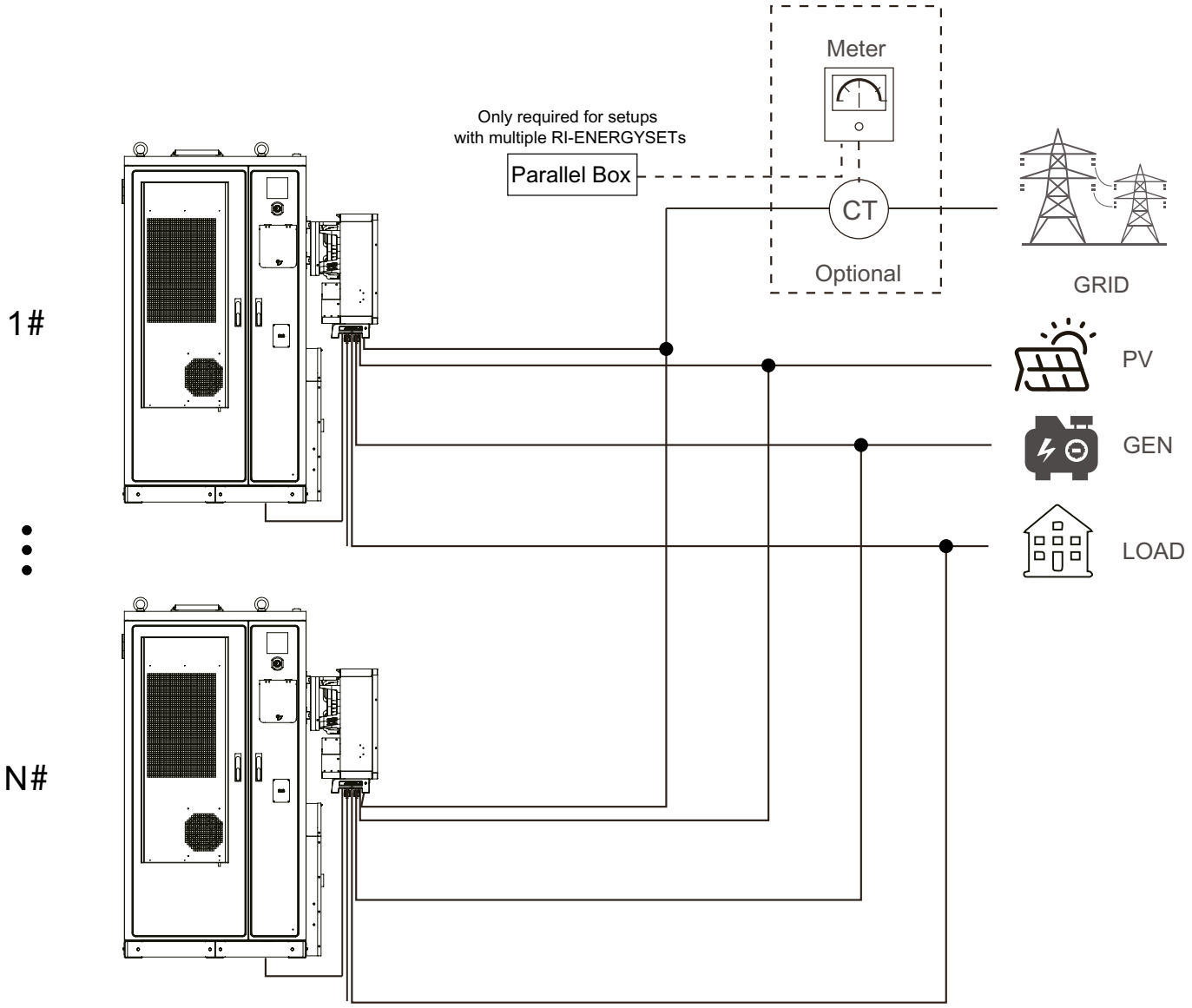
Base Requirements and Recommendations

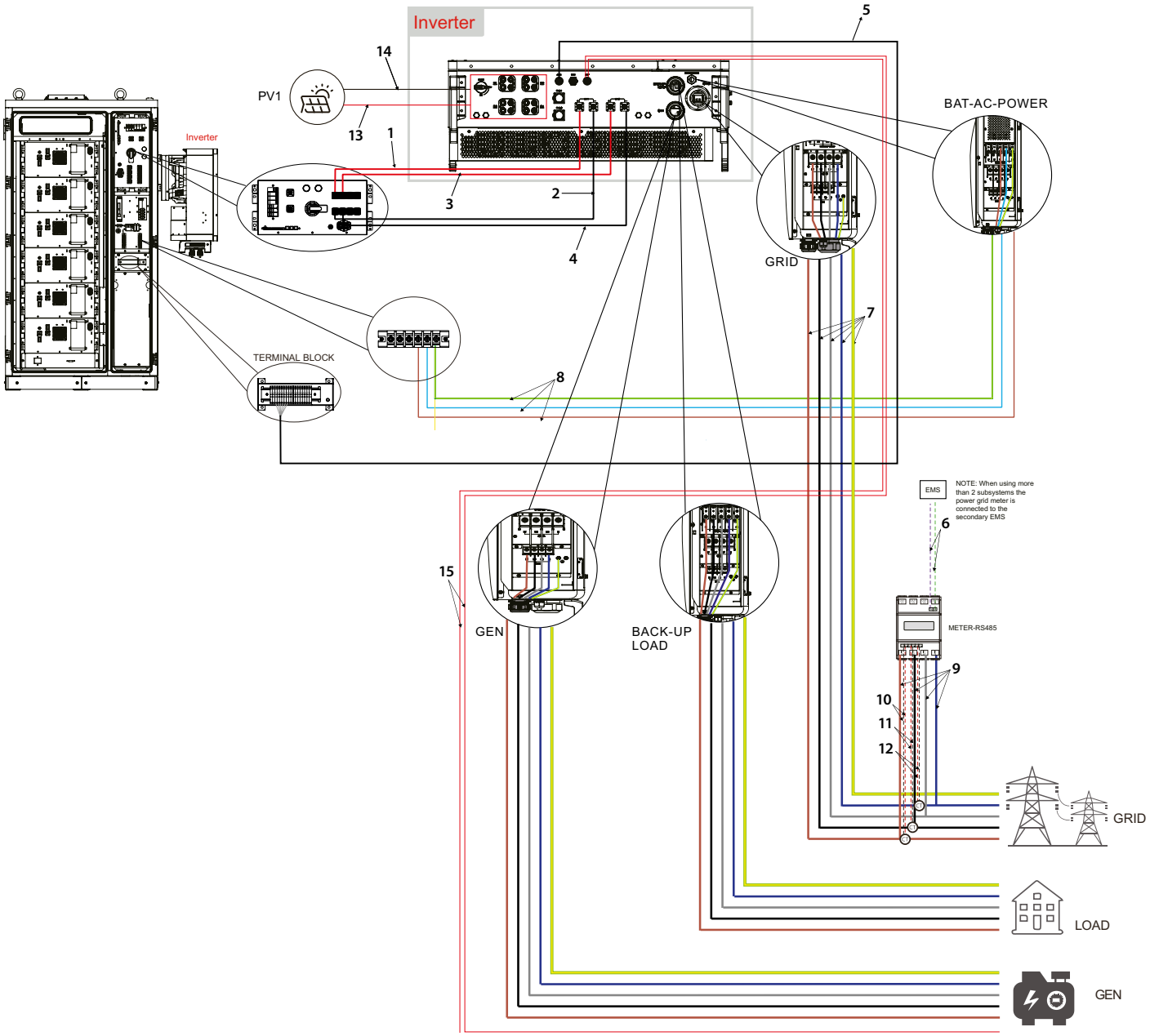


- This diagram serves as a reference schematic for foundation construction.
  Users should determine the specific construction plan based on local conditions.
- The dimensions shown in this diagram with tolerances are for installation purposes. Other dimensions can be adjusted by the user based on local conditions.
- The platform surface should be levelled using a levelling tool to ensure horizontal alignment and prevent deformation during equipment installation.
- The area around the platform should be clear and unobstructed, especially around the equipment's access doors (see basic configuration in the previous section).
- **The platform perimeter should be equipped with protective fencing and prominently display safety signs in accordance with national standards and local electrical regulations.**
- Wiring for both AC and DC should be securely fastened and properly tied to ensure stability and avoid any loose connections.
- The base should be made of reinforced concrete, have a load bearing capacity of 3 tons and factor in local ground conditions and should not be located in an area that is prone to flooding.
- The base should be a minimum of 400mm greater than the footprint of the battery cabinet on all sides.
- The device should be bolted to the base with suitable M12 bolts.
- Removable trench covers should be used for cable trenches, and the covers should be made of patterned steel plates with a thickness of no less than 6mm.
- Fire extinguishers should be procured and installed by the customer to meet local fire safety requirements.
- The device must be grounded and tested. The resistance of the grounding should be less than 4 ohms.

Schematic Diagram



Wiring Diagram



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Connection Table

Connect	From			To		
1	RI-ENERGYFLOW-3P-HYBRID-50B	BAT1	+	RI-ENERGYSET-3P-ESS-50-107	BAT	+
2	RI-ENERGYFLOW-3P-HYBRID-50B	BAT1	–	RI-ENERGYSET-3P-ESS-50-107	BAT	–
3	RI-ENERGYFLOW-3P-HYBRID-50B	BAT2	+	RI-ENERGYSET-3P-ESS-50-107	BAT	+
4	RI-ENERGYFLOW-3P-HYBRID-50B	BAT2	–	RI-ENERGYSET-3P-ESS-50-107	BAT	–
5	RI-ENERGYFLOW-3P-HYBRID-50B	COM	BMS_CAN_H/BMS_CAN_L	RI-ENERGYSET-3P-ESS-50-107	TERMINAL BLOCK	Pin3/Pin4
	RI-ENERGYFLOW-3P-HYBRID-50B	COM	485A/485B	RI-ENERGYSET-3P-ESS-50-107	TERMINAL BLOCK	Pin7/Pin8
	RI-ENERGYFLOW-3P-HYBRID-50B	COM	EMS_CAN_H/EMS_CAN_L	RI-ENERGYSET-3P-ESS-50-107	TERMINAL BLOCK	Pin5/Pin6
6	Meter (RI-D140 / RI-D240)	A/B	485A/485B	EMS	TERMINAL BLOCK	Pin1/Pin2
7	RI-ENERGYFLOW-3P-HYBRID-50B	GRID	A/B/C/N/PE	GRID		A/B/C/N/PE
8	RI-ENERGYFLOW-3P-HYBRID-50B	INPUT	L/N/PE	BAT-AC-POWER		L/N/PE
9	Meter (RI-D140 / RI-D240)	IN	A/B/C/N	GRID		A/B/C/N
10	Meter (RI-D140 / RI-D240)		L1+/L1–	CT(A)		S1/S2
11	Meter (RI-D140 / RI-D240)		L2+/L2–	CT(B)		S1/S2
12	Meter (RI-D140 / RI-D240)		L3+/L3–	CT(C)		S1/S2
13	RI-ENERGYFLOW-3P-HYBRID-50B	PV+	PV1+/PV2+/PV3+/PV4+	Photovoltaic panels		PV+
14	RI-ENERGYFLOW-3P-HYBRID-50B	PV–	PV1–/PV2–/PV3–/PV4–	Photovoltaic panels		PV–
15	RI-ENERGYFLOW-3P-HYBRID-50B	DRY	1/2	GEN		GEN-START 1/2

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