

## SBP4K8 outdoor installation requirements

IP rating of an SBP4K8 Sungrow/Samsung battery is 55, which can be shown as below explanation.

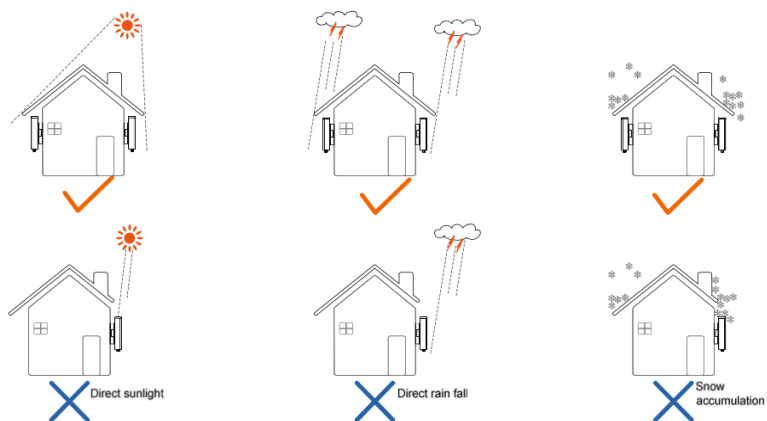
IP Rating	First digit: Solid particle protection	Second digit: Liquid ingress protection
IP55	Protected from limited dust ingress	Protected from low pressure water jets from any direction, limited ingress protection

The definition of the second digit (IPX5):

Level	Protection against	Effective against	Details
5	Water jets	Water projected by a nozzle (6.3 mm) against enclosure from any direction shall have no harmful effects	Test duration: 1 minute per square meter for at least 15 minutes Water volume: 12.5 litres per minute Pressure: 30 kPa at distance of 3 m

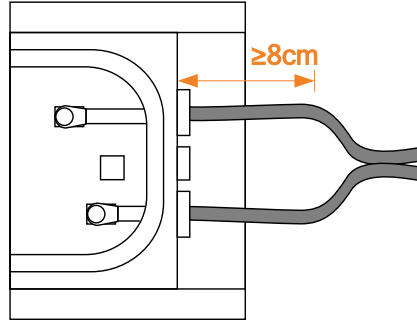
This installation photo (left picture) shows below without any eave to cove the inverter and battery, which may void warranty. *This is because the water ingress of heavy rain is cumulative beyond IPX5 in some cases.*

Hence, the shaded side of the building would be better to prevent the battery from exposure to the sun, rain, and snow (right picture). Battery must not be mounted in direct sunlight as this affects the internal heat, and therefore efficiency of the battery.

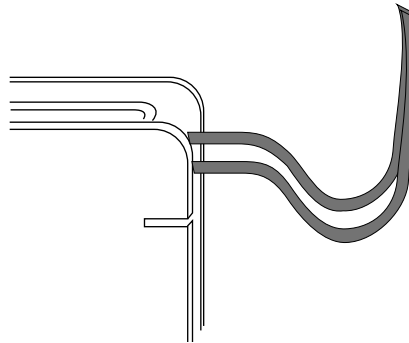


The outdoor installation requirements of batteries are explained in below.

1. Ensure the power cable does not place any strain on the grommet, and must be straight not less than 8 cm on the outside of the enclosure.



2. Ensure the curve on the power cable as shown on the below photo, which will reduce the possibility of water ingress along the cable; Lay the cables in a protection pipe or tie them with cable ties to minimize cable movement.



3. Connect the other end of the positive cable to the Bat+ port and the negative cable to the Bat- port at the bottom of the Sungrow hybrid inverter
4. Ensure the grommets are secure, and the cable entry aperture is smaller than the cable diameter. Silicone can be used for extra protection.

