

## Growatt SP2000 Storage System

## **Installation Tips**

Hopefully you have fully read the installation manual, however below are some key points which are worth highlighting for the installation of the SP2000.

These are installer tips to ensure that your specification of the SP2000 is as successful as possible. Your distributor will assist with any questions you have when specifying an SP2000 Storage System. Please ask any or as many questions as you wish in order to fully understand your installation prior to commencing the installation:

- Available PV Power The SP2000 system is designed to be used with systems from 2-8kw of available PV. This is a multiple string input system, but is not dual tracking. So you can have 1, 2 or 3 string inputs but all the panels need to be the same size and facing the same direction. In order to charge the batteries you need sufficient RESIDUAL power. So if this is a small PV array and the occupants are in every day and using a lot of power, you will limit the power available to fully charge the batteries. Check out fully all of these factors before specifying the SP2000 system.
- Input supply This is a single tracking unit. If you have a Twin or Dual tracking installation, then you can choose the larger of the 2 strings to put through the SP2000, and leave the smaller string straight through to the inverter. As with specifying power into an inverter, you must check the power (volts and amps) of each string into the SP2000. Check that the maximum voltage is not exceeded 580v, and check that the SP2000 STARTING voltage will be easily supplied 150v start-up which will then modulate down to 130v once up and running.
- **Output supply** Once the SP2000 controller detects demand from the property and insufficient supply from the PV panels, it will start to supply the inverter by DISCHARGING the battery. The initial discharge load is set to 500v, which will then modulate down to 380v once the inverter starts to operate. Ensure that the INPUT supply of the inverter is higher than the OUTPUT supply (500v) of the SP2000. If the inverter level is on or around 500v, then contact your supplier as a modification may be possible to the parameters. Surveying the installation

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- Locating the system The ideal place to install the SP2000 system is close to the inverter. Ensure that you have a wall or structure sufficiently strong to hold the weight of the Battery pack (46kg). The SP2000 is not rated to be installed outside. Check that you have some air flow and are within the temperature and Humidity levels for the system. Most internal U.K. locations will be correct.
- Surveying the installation Ensure that you have adequate access to get the parts into place, be aware of very small roof hatches! The installation of the SP2000 requires an AC plug point for the controller unit (this is just to allow it to be on standby at all times). A Spur from the AC supply to the inverter could be used. The SP2000 requires that a Sensor is clamped around the AC supply to the property. This provides the controller with the flow of electricity to and from the property. The sensor has a 5m length of RJ45 attached to it. If more is required then purchase and extension prior to the installation. Ensure you have checked how simple or otherwise installing this cable will be.
- Installation Most installations are straight forward. However the most common cause of error has been cross polarity either from the panels to the SP2000 controller (which will give you an error message to this effect) or from the controller to the inverter (no error as it is beyond the SP2000). PLEASE CHECK POLARITY AT ALL TIMES.
- Selecting the monitoring the simplest method of monitoring the installation is via the Wi-Fi dongle which connects to the router wirelessly in the property. Ensure you are fully conversant with this procedure before you commence the installation. Check you have read and understood the connection process.

## NOTE:

These points are based on feedback from existing installations. If you have any further recommendations please inform us and we will try to incorporate them in future information, or look to take your recommendations back to the R & D department for modification or upgrades to the system.

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