

Sungrow Battery cross-reference chart

Disclaimer

The material in this document has been prepared by Sungrow Australia Group Pty. Ltd. ABN 76 168 258 679 and is intended as a guideline to assist solar installers for troubleshooting. It is not a statement or advice on any of the Electrical or Solar Industry standards or guidelines. Please observe all OH&S regulations when working on Sungrow equipment.







Please use the below chart to help with battery design:

SBR Range (Max 30A charge/discharge):

	SBR064 ³  2 modules	SBR096  3 modules	SBR128  4 modules	SBR160  5 modules	SBR192  6 modules	SBR224  7 modules	SBR256  8 modules
SH5.0RS	YES* Max 3.84kW	YES	YES	YES	YES	YES	NO Exceeds inverter voltage range
SH6.0RS	YES* Max 3.84kW	YES* Max 5.76kW	YES	YES	YES	YES	NO Exceeds inverter voltage range
SH8.0RS	YES* Max 3.84kW	YES* Max 5.76kW	YES* Max 7.68kW	YES	YES	YES	NO Exceeds inverter voltage range
SH10RS	YES* Max 3.84kW	YES* Max 5.76kW	YES* Max 7.68kW	YES* Max 9.60kW	YES	YES	NO Exceeds inverter voltage range
SH5.0RT	NO Does not reach inverter startup voltage	YES* Max 5.76kW (cannot handle surge rating without PV)	YES	YES	YES	YES	YES
SH10RT	NO Does not reach inverter startup voltage	YES* Max 5.76kW	YES* Max 7.68kW	YES* Max 9.60kW	YES	YES	YES

	SBR064 ³  2 modules	SBR096  3 modules	SBR128  4 modules	SBR160  5 modules	SBR192  6 modules	SBR224  7 modules	SBR256  8 modules
SH5T	NO Does not reach inverter startup voltage	YES* Max 5.76kW (cannot handle surge rating without PV)	YES	YES	YES	YES	YES
SH10T	NO Does not reach inverter startup voltage	YES* Max 5.76kW	YES* Max 7.68kW	YES* Max 9.60kW	YES	YES	YES
SH15T	NO Does not reach inverter startup voltage	YES* Max 5.76kW	YES* Max 7.68kW	YES* Max 9.60kW	YES* Max 11.52kW	YES* Max 13.44kW	YES* Max 15.36kW (cannot handle surge rating without PV)
SH20T	NO Does not reach inverter startup voltage	YES* Max 5.76kW	YES* Max 7.68kW	YES* Max 9.60kW	YES* Max 11.52kW	YES* Max 13.44kW	YES* Max 15.36kW
SH25T	NO Does not reach inverter startup voltage	YES* Max 5.76kW	YES* Max 7.68kW	YES* Max 9.60kW	YES* Max 11.52kW	YES* Max 13.44kW	YES* Max 15.36kW

SBH Range (Max 50A charge/discharge):

	SBH150  3 modules	SBH200  4 modules	SBH250  5 modules	SBH300  6 modules	SBH350  7 modules	SBH400  8 modules
SH5.0RS (Max 30A on battery)	YES* Max 6.3kW (cannot handle surge rating without PV)	YES	YES	YES	NO Exceeds inverter voltage range	NO Exceeds inverter voltage range
SH6.0RS (Max 30A on battery)	YES* Max 6.3kW (cannot handle surge rating without PV)	YES	YES	YES	NO Exceeds inverter voltage range	NO Exceeds inverter voltage range
SH8.0RS	YES* Max 10.56kW (cannot handle surge rating without PV)	YES	YES	YES	NO Exceeds inverter voltage range	NO Exceeds inverter voltage range
SH10RS	YES* Max 10.56kW (cannot handle surge rating without PV)	YES	YES	YES	NO Exceeds inverter voltage range	NO Exceeds inverter voltage range
SH5.0RT (Max 30A on battery)	YES* Max 6.3kW (cannot handle surge rating without PV)	YES* Max 8.4kW (cannot handle surge rating without PV)	YES	YES	YES	NO Exceeds inverter voltage range
SH10RT (Max 30A on battery)	YES* Max 6.3kW	YES* Max 8.4kW	YES* Max 10.5kW (cannot handle surge rating without PV)	YES	YES	NO Exceeds inverter voltage range

	SBH150  3 modules	SBH200  4 modules	SBH250  5 modules	SBH300  6 modules	SBH350  7 modules	SBH400  8 modules
SH5T	YES	YES	YES	YES	YES	YES
SH10T	YES* Max 10.5kW <small>(cannot handle surge rating without PV)</small>	YES* Max 14.08kW <small>(cannot handle surge rating without PV)</small>	YES	YES	YES	YES
SH15T	YES* Max 10.5kW	YES* Max 14.08kW	YES	YES	YES	YES
SH20T	YES* Max 10.5kW	YES* Max 14.08kW	YES* Max 17.60kW	YES	YES	YES
SH25T	YES* Max 10.5kW	YES* Max 14.08kW	YES* Max 17.60kW	YES* Max 21.12kW	YES* Max 24.64kW	YES

Please refer to the following page for explanation of colour codes

NO	Not permitted. Voltages are outside of inverters rated input limits. Please refer to inverter data sheets for more information.
YES*	Will supply kWh, but will not supply full power of inverter rated backup from battery alone. The number quoted is maximum battery discharge. The surplus needs to come from PV. Please refer to battery data sheet for more information.
YES	100% Compatible.

Notes:

³ SBR064 consists of 2 battery modules and 1 empty module.

Supplementary power:

The numbers stated above are purely battery discharge/charge ratings (please refer to battery data sheets). If the battery power is insufficient, the power can be made up by PV generation to the inverters capacity. The PV is still the primary source to supply house loads during an outage or normal use, and any surplus will charge the battery if needed. If the power generated by PV is not required for battery charge, the inverter will derate to meet loads only in an outage, or be supplemented from the grid in normal use.

Please refer to the product manuals for further information.

Parallel feature:

Two equal stacks can be connected in parallel by using a 'Y' connector. Equal cable length **MUST** be used in accordance with Australian Standards.

Three or Four equal stacks can be connected in parallel by using a combiner box.

Please refer to Sungrow Tech support for full details.

Adding stacks increases the capacity only, and the voltage and current remain the same.

'Y' connectors for **SH8/10RS**, and **SHT** series can be purchased from Sungrow accessories page <https://service.sungrowpower.com.au/Warranty/accessory-order>

'Y' connectors for **SH5/6RS** and **SHRT** series can use Staubli EVO2 series branch connector.

DC cable sizing:

SBR range; Minimum 6mm (30A charge/discharge).

SBH range: Minimum 10mm (50A charge/discharge).

Appropriate standards and regulations must be followed.

Maximum distances:

It is recommended that the cable length between the inverter and battery does not exceed 20 metres. Appropriate voltage rise calculations must be accounted for when selecting the cable size.