SMA Solar Technology AG | Sonnenallee 1 | 34266 Niestetal | Germany
Phone: +49 561 9522-0 | Fax: +49 561 9522-100 | Internet: www.SMA.de | Email: info@SMA.de
Amtsgericht (District court) Kassel HRB (registration number) 3972
Vorsitzender des Aufsichtsrats (Chairman of the Supervisory Board): Dr. Erik Ehrentraut
Managing Board: Ulrich Hadding, Dr.-Ing. Jürgen Reinert

Manufacturer's Declaration - Rated Power of the PV Array

The maximum permissible rated power of the PV array is stated in the datasheets of our inverters. The rated power of the PV array affects the service life of the inverter. Therefore, observing this limiting value is a condition for warranty services by SMA.
Our inverters are suitable for worldwide use and were developed and tested for operation in sunny regions. In regions with less solar irradiation or with PV arrays not optimally aligned, the load on the inverter is smaller. In these cases, the maximum rated power of the PV array stated in the datasheet may be exceeded for some of our inverters under certain boundary conditions (see below).
The new criteria for the reliability of a PV array are the full load hours to be expected at the planned PV system location. These can be determined from the energy fed in yearly and the rated power of the inverter on the grid side and indicate how long the inverter would have to run at rated power in order to be able to reach the energy amount fed in.
As an example, an inverter with a rated power of 10 kW on the grid side and a yearly feed-in of 12000 kWh reaches a full load hour of 12000 kWh / 10 kW = 1200 h. When planning a system with Sunny Design, the full load hours for the inverters used are determined.

When satisfying these conditions:

- Our planning program Sunny Design calculates no more than 2400 full load hours for the combination of PV array and inverter at the planned system location.
- All other limiting values of the inverter (especially max. open-circuit voltage and short-circuit current of the PV array) are observed.

The warranty claim remains valid for the inverters listed below from production date January 1, 2019, even when the maximum permissible rated power of the PV array stated in the datasheet is exceeded.

- SB1.5-1VL-40 / SB2.0-1VL-40 / SB2.5-1VL-40
- SB3.0-1AV-41 / SB3.6-1AV-41 / SB4.0-1AV-41 / SB5.0-1AV-41 / SB6.0-1AV-41
- SB3.0-1SP-US-41 / SB3.8-1SP-US-41 / SB5.0-1SP-US-41 / SB6.0-1SP-US-41 / SB7.0-1SP-US-41 / SB7.7-1SP-US-41
- STP3.0-3AV-40 / STP4.0-3AV-40 / STP5.0-3AV-40 / STP6.0-3AV-40 / STP8.0-3AV-40 / STP10.0-3AV-40
- STP 50-40 / STP 50-JP-40
- STP 33-US-41 / STP 50-US-41 / STP 62-US-41
- STP 15000TL-30 / STP 20000TL-30 / STP 25000TL-30 / STP 25000TL-JP-30
- STP 60-10 / STP 60-JP-10 / SHP75-10
- SHP 125-US-20 / SHP 150-US-20 / SHP 100-20 / SHP 150-20

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SMA Solar Technology AG

i.V. Sven Bremicker

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Head of Technology Development Center