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Manufacturer's Declaration

Zero Feed-in Mode (Zero Export) for PV Systems

The Sunny Home Manager is equipped with a new feature that reduces feed-in of locally generated PV power to the utility grid to a minimum. This makes it possible to realize PV systems with almost 100% self-consumption.

In Zero Export mode, the Sunny Home Manager ensures that the PV power currently generated by the PV inverters is always controlled in such a way that it equals the current total power consumption in the household of all phases connected. If an active load/appliance in the household is switched off, the grid feed-in of excess PV power will automatically be reduced to a value less of than 2% of nominal PV system power within a reaction time of 1.5 to 2.5 seconds*.

This control characteristic is valid under the following conditions:

- 1. When the Sunny Home Manager 2.0 (HM-20) is installed at the grid-connection point via its integrated measuring device, the control of feed-in power is being carried out correctly.
- 2. An SMA Energy Meter must be installed at the grid-connection point in connection with the Sunny Home Manager Bluetooth (HM-BT-10, firmware version > 1.11.4.R).
- 3. All necessary installation measures are carried out and checked in accordance with the installation manual of the Sunny Home Manager.
- 4. Configuration of the active power limitation settings to 0% is done by a qualified technician.

Note:

- In case of Sunny Home Manager Bluetooth (HM-BT-10): If D0 meters are used to measure the power level for grid feed-in and grid purchase at the grid-connection point, the Zero-Feed-in reaction time of will be prolonged due to the significantly slower output of measured values.
- 2. S0 meters are not supported.
- 3. In terms of zero export, the operation of a Sunny Boy Smart Energy is not being supported. The use of other SMA inverters is possible as of firmware version 1.13.

Niestetal, 2017-08-21

SMA Solar Technology AG

ppa. Dr.-Ing. Johannes Kneip

EVP Development Center

HK Zero-Export-fuer-PV-Anlagen en 12

^{*} with storage systems, the reaction time can increase up to 7.5 seconds.