



## Manufacturer's Declaration

### 0% Feed-in Mode (Zero Export) for PV Systems

From firmware version 1.11.4.R, the Sunny Home Manager is equipped with a new feature to reduce feed-in of locally generated PV power to the utility grid to a minimum. This makes it possible to realise PV systems with almost 100% self-consumption.

In 0% Feed-in Mode (Zero Export), the Sunny Home Manager ensures that the PV power currently generated by the inverters always matches the current power consumption of the household. If an active load/appliance in the household is switched off, automatically the occurring PV excess power feed-in will be reduced to a value of less 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. At the grid-connection point an SMA Energy Meter is used for measuring grid purchase and grid feed-in power levels.
2. All necessary installation measures are carried out and tested according to instructions of the Sunny Home Manager installation manual.
3. Configuration of the active power limitation settings to 0% is done by a trained technician.

Information:

1. If DO meters are used for grid feed-in and grid purchase power level measurement at the grid-connection point, zero export control reaction time will be prolonged due to the significantly slower measurement speed of DO meters. The maximum permitted rate of measurement value output is fixed at 1 value per 4 seconds. If measurement values are received in larger intervals, the PV inverters will permanently be set to an output power of 0 W AC.
1. SO meters are not supported.
2. In firmware version 1.11.4.R, battery inverters are not fully supported. For instance, if a Sunny Boy Smart Energy or a Sunny Island is present in the local PV system, the assigned battery will be discharged without any possibility of recharge.

Niestetal, January 23, 2015

**SMA Solar Technology AG**

A handwritten signature in black ink, appearing to read 'F. Greizer', is written over a light blue horizontal line.

ppa. Frank Greizer

(Head of Development SI Solutions)