

# For England only: Compliance with G59/3

## STP 15000TLEE-10 / STP 20000TLEE-10



As of December 2014, the requirements of the English standard G59/3 will become effective for all new PV systems in England.

In order to operate one of the above listed inverters in England which is currently set to the G59/2 standard, but is to meet the requirements of the G59/3 standard, several inverter parameters must be set after commissioning. Only qualified persons are allowed to set the parameters.

Furthermore, it is possible that the above mentioned inverters are already delivered in accordance with the G59/3 standard as of April 2014. Setting the parameters will then no longer be required. The new firmware with the country data set G59/3 will presumably be available by the end of 2014.

### Requirements:

- The current firmware contains the country data set G59/2.
- The inverter must be registered in a communication product.
- Depending on the communication product and the type of communication, a computer with *Bluetooth* or *Ethernet* interface must be available.
- An SMA Grid Guard code must be available (see order form for the SMA Grid Guard code at [www.SMA-Solar.com](http://www.SMA-Solar.com)).

### Procedure:

1. Call up the user interface of the communication product or start the software and open the PV system as **Installer**.
2. Enter the SMA Grid Guard code or activate the SMA Grid Guard mode (see manual of the communication product).
3. Make sure that the parameter **CntrySet** or **Set country standard** is set to **G59/2**.
4. Select the following parameters for voltage monitoring and set them in accordance with G59/3:

Parameter name for RS485	Parameter name for Bluetooth or Speedwire/ Webconnect	Default value as per G59/2	Value to be set as per G59/3
VRtg	Grid nominal voltage	240 V	230 V
VolCfl.hhLim	Voltage monitoring median maximum threshold	276 V	276.5 V
VolCfl.hhLimTms	Voltage monitoring median maximum threshold trip.time	500 ms	560 ms
VolCfl.hLim	Voltage monitoring lower maximum threshold	264 V	265 V

<b>Parameter name for RS485</b>	<b>Parameter name for Bluetooth or Speedwire/ Webconnect</b>	<b>Default value as per G59/2</b>	<b>Value to be set as per G59/3</b>
VolCtl.hLimTms	Voltage monitoring lower maximum threshold trip.time	1,000 ms	1,060 ms
VolCtl.lLim	Voltage monitoring lower minimum threshold	208.8 V	197.3 V
VolCtl.lLimTms	Voltage monitoring lower minimum threshold trip.time	2,500 ms	2,560 ms
VolCtl.lLim	Voltage monitoring of median minimum threshold	192 V	181.2 V
VolCtl.lLimTms	Voltage monitoring of median minimum threshold trip.time	500 ms	560 ms

5. Select the following parameters for frequency monitoring and set them in accordance with G59/3:

<b>Parameter name for RS485</b>	<b>Parameter name for Bluetooth or Speedwire/ Webconnect</b>	<b>Default value as per G59/2</b>	<b>Value to be set as per G59/3</b>
FrqCtl.hhLim	Frequency monitoring upper maximum threshold	52 Hz	52.1 Hz
FrqCtl.hhLimTms	Frequency monitoring upper maximum threshold trip.time	500 ms	565 ms
FrqCtl.hLim	Frequency monitoring lower maximum threshold	51.5 Hz	51.6 Hz
FrqCtl.lLim	Frequency monitoring upper minimum threshold	47.5 Hz	47.4 Hz
FrqCtl.lLimTms	Frequency monitoring upper minimum threshold trip.time	20,000 ms	20,065 ms
FrqCtl.lLim	Frequency monitoring lower minimum threshold	47 Hz	46.9 Hz
FrqCtl.lLimTms	Frequency monitoring lower minimum threshold trip.time	500 ms	565 ms

6. Select the following parameters for islanding detection and set them in accordance with G59/3:

Parameter name for RS485	Parameter name for Bluetooth or Speedwire/ Webconnect	Default value as per G59/2	Value to be set as per G59/3
Aid.AsymDetMaxT	Trip.time of islanding detection unbalance detect.	1,000 ms	500 ms
Aid.HzMon.Tmms	Tripping time of islanding detection frq. monitor	1,000 ms	500 ms

7. Select the following parameters for (re)connection time and set them in accordance with G59/3:

Parameter name for RS485	Parameter name for Bluetooth or Speedwire/ Webconnect	Default value as per G59/2	Value to be set as per G59/3
GriFltMonTms	Reconnection time upon grid interruption	180	20
GrdFltReConTms	Reconnection time upon short interruption	180	20

8. Record all changes made (e.g. on the supplementary sheet with the default settings).
- The changes are saved in the communication product and the data is transferred to the inverter. The data is stored in the main memory of the inverters and the display shows the country data set "Adj" (adjusted) upon start-up of the inverter.