

## **Manufacture's Declaration**

## Confirmation of Compliance with the Requirements of EN 50549-1:2019

we hereby confirm that all Solplanet inverters listed below table meet the requirement of EN 50549-1:2019 with the deviation of the Netherlands.

| Brand                      | Solplanet |           |           |           |
|----------------------------|-----------|-----------|-----------|-----------|
| Type reference             | ASW3000-S | ASW3680-S | ASW4000-S | ASW5000-S |
| Max. input DC voltage      | 580V      | 580V      | 580V      | 580V      |
| MPP DC voltage range       | 80 – 550V | 80 – 550V | 80 – 550V | 80 – 550V |
| Max. input DC current      | 12A       | 12A       | 12A       | 12A       |
| Rated output AC voltage    | 230V      | 230V      | 230V      | 230V      |
| Max. output AC current     | 15A       | 16A       | 20A       | 22.7A     |
| Max. apparent output power | 3000VA    | 3680VA    | 4000VA    | 5000VA    |

The inverters meet the requirement of EN 50549-1:2019 with the deviation of the Netherlands, along with the specifications in the data sheet and the CE declaration, by the following points:

- The default values for the requirements on voltage and frequency protection are from the standard EN 50438: 2013 with the deviation of the Netherlands.
- The certificate of compliance with EN 50549-1:2019 has been issued by an accredited institute. The certificate can be downloaded from the website <u>www.aiswei-tech.com</u>.
- The factory setting for the active factor is one.
- The factory setting for power response to over-frequency is activated.
- The grid protection parameters and field adjustable parameters can't be changed by user, an installer or by any person other than AISWEI.

Suzhou, 2020-02-20 AISWEI New Energy Technology (Jiangsu) Co., Ltd.

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## Appendix

|                           | Parameter                                    | Typical value range | Value default |  |  |
|---------------------------|--|---------------------|---------------|--|--|
| 4.9.2 Requirements on     | Undervoltage threshold stage 1               | 0.2 Un – 1 Un       | 0.8 Un        |  |  |
| voltage and frequency     | Undervoltage operate time stage 1            | 0.1 s – 100 s       | 2 s           |  |  |
| protection                | Undervoltage threshold stage 2               | 0.2 Un – 1 Un       | N/A           |  |  |
|                           | Undervoltage operate time stage 2            | 0.1 s – 5 s         | N/A           |  |  |
|                           | Overvoltage threshold stage 1                | 1.0 Un – 1.2 Un     | 1.1 Un        |  |  |
|                           | Overvoltage operate time stage 1             | 0.1 s – 100 s       | 2 s           |  |  |
|                           | Overvoltage threshold stage 2                | 1.0 Un – 1.3 Un     | N/A           |  |  |
|                           | Overvoltage operate time stage 2             | 0.1 s – 5 s         | N/A           |  |  |
|                           | Overvoltage threshold 10 min mean protection | 1.0 Un – 1.15 Un    | N/A           |  |  |
|                           | Underfrequency threshold stage 1             | 47.0 Hz– 50.0 Hz    | 48 Hz         |  |  |
|                           | Underfrequency operate time stage 1          | 0.1 s – 100 s       | 2 s           |  |  |
|                           | Underfrequency threshold stage 2             | 47.0 Hz – 50.0 Hz   | N/A           |  |  |
|                           | Underfrequency operate time stage 2          | 0.1 s – 5 s         | N/A           |  |  |
|                           | Overfrequency threshold stage 1              | 50.0 Hz – 52.0 Hz   | 51 Hz         |  |  |
|                           | Overfrequency operate time stage 1           | 0.1 s – 100 s       | 2 s           |  |  |
|                           | Overfrequency threshold stage 2              | 50.0 Hz – 52.0 Hz   | N/A           |  |  |
|                           | Overfrequency operate time stage 2           | 0.1 s – 5 s         | N/A           |  |  |
| 1.10.2 Automatic          | Lower frequency                              | 47.0 Hz – 50.0 Hz   | 49.5 Hz       |  |  |
| econnection after         | Upper frequency                              | 50.0 Hz – 52.0 Hz   | 50.2 Hz       |  |  |
| tripping                  | Lower voltage                                | 50 % Un – 100 % Un  | 85 % Un       |  |  |
|                           | Upper voltage                                | 100 % Un – 120 % Un | 110 % Un      |  |  |
|                           | Observation time                             | 10 s – 600 s        | 60 s          |  |  |
|                           | Active power increase gradient               | 6 % – 3000 %/min    | 10 % /min     |  |  |
| 1.10.3 Starting to        | Lower frequency                              | 47.0 Hz – 50.0 Hz   | 49.5 Hz       |  |  |
| generate electrical power | Upper frequency                              | 50.0 Hz – 52.0 Hz   | 50.1 Hz       |  |  |
|                           | Lower voltage                                | 50 % Un – 100 % Un  | 85 % Un       |  |  |
|                           | Upper voltage                                | 100 % Un – 120 % Un | 110 % Un      |  |  |
|                           | Observation time                             | 10 s – 600 s        | 60 s          |  |  |
|                           | Active power increase gradient               | 6 % – 3000 %/min    | disable       |  |  |
| Permanent DC-injection    | 0.5% of rated inverter output current        |                     |               |  |  |
| oss of Mains (LoM)        | 2s according to EN 62116                     |                     |               |  |  |