

# AS-IR01 RESIDENTIAL INVERTER

Grid-tied solar inverter  
Single phase, 2 MPPT  
3 kW to 5 kW

Single-phase inverter with two MPPT  
for greater planning flexibility of  
small to medium PV-installations



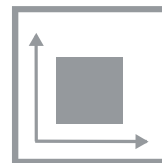
The AEG AS-IR01 inverter series belongs to a new generation of PV string inverters for grid-tied installations, specifically developed for residential systems. Thanks to its compact size and light weight, the single-phase inverter AEG AS-IR01 is easily installed and maintained. With 2 MPPT it allows greater system design flexibility and higher levels of harvested energy. It is designed with the latest thermal simulation technologies to ensure a long service life. The wide voltage range, its low starting voltage and high conversion efficiency make of AEG AS-IR01 an ideal choice for small-to medium scale installations. AEG AS-IR01 features a global, integrated monitoring and management system, supporting different kinds of portable mobile devices. AEG AS-IR01 complies with the relevant industry standards VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS-4777/3100,

EN61000-6-1:4, EN61000-3-2:3 / -11:12, IEC 62109-1:2010. The AEG AS-IR01 inverter is provided with a 10 years product warranty (which can be optionally extended to 15/20 years for comfort service over a longer timespan).

|                |                       |                |
|----------------|-----------------------|----------------|
| AS-IR01-3000-2 | AC Output rated power | 3 kW, 2 MPPT   |
| AS-IR01-4000-2 | AC Output rated power | 4 kW, 2 MPPT   |
| AS-IR01-4600-2 | AC Output rated power | 4.6 kW, 2 MPPT |
| AS-IR01-5000-2 | AC Output rated power | 5 kW, 2 MPPT   |



Best fit for small to medium installations



Compact size



2 MPPT for greater system design flexibility



Global monitoring

Distributeur in de Benelux van AEG zonnepanelen:



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**AEG**  
perfekt in form und funktion

|   | AS-IR01-   | 3000-2   | 4000-2 | 4600-2 | 5000-2 |
|---|--|--|--------|--------|--------|
| <b>INPUT (DC)</b>                             |  |  |        |        |        |
| Rated DC input power (W)                      |  | ???  | 4000   | 4600   | 5000   |
| Max. DC input power (W)                       |  | 3300   | 4500   | 5000   | 5500   |
| Max. DC Voltage (V)                           |  | 600  | ???    | ???    | ???    |
| Starting Voltage / Min. Operation Voltage (V) | 120/100  |  |        |        |        |
| Starting Power (W)                            | 30   | 50   |        |        |        |
| MPPT Operating Voltage Range (V)              | 120-550  |  |        |        |        |
| Number of MPPT / String per MPPT              | 2/1  |  |        |        |        |
| Max. DC Current (A) per MPPT x Nr. of MPPT    | 10 x 2   | 10 x 2   | 11 x 2 | 12 x 2 |        |
| DC Switch                                     | Optional   |  |        |        |        |
| <b>OUTPUT (AC)</b>                            |  |  |        |        |        |
| Rated Power (W)                               | ???  | 3680   | 4200   | 4600   |        |
| Max. Power (W)                                | 3100   | 4000   | 46000  | 5000   |        |
| Max. AC Output Current (A)                    | 16   | 19   | 21     | 23     |        |
| AC Voltage Range                              | 230/180-277Vac<br>According to VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100   |  |        |        |        |
| Grid Frequency                                | 50 Hz (44-55 Hz) / 60 Hz (54-65 Hz)<br>According to VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100  |  |        |        |        |
| Power Factor                                  | ≥0.99 (Adjustable)   |  |        |        |        |
| THD   | <3% (At Rated Power)   |  |        |        |        |
| AC Connection                                 | Single-phase (L, N, PE)  |  |        |        |        |
| <b>SYSTEM</b>                                 |  |  |        |        |        |
| Cooling                                       | Natural cooling  |  |        |        |        |
| Max. Efficiency (%)                           | 97.90  | 97.90  | 98.00  | 98.00  |        |
| Euro-Efficiency (%)                           | 96.80  | 96.80  | 96.80  | 96.80  |        |
| MPPT Efficiency (%)                           | 99   |  |        |        |        |
| Ingress Protection                            | IP65   |  |        |        |        |
| Consumption at Night                          | <1W  |  |        |        |        |
| Topology                                      | Transformerless  |  |        |        |        |
| Operating Temperature                         | -25°C ~ +60°C (derate after 45°C)  |  |        |        |        |
| Relative Humidity                             | 0 ~+95%, no condensation   |  |        |        |        |
| Protection                                    | Overvoltage protection; DC insulation monitoring; DC Overcurrent protection monitoring; Grounding fault monitoring; Grid protection; Island protection; Overheating protection; Overvoltage and Short Circuit protection |  |        |        |        |
| <b>MECHANICAL PARAMETERS</b>                  |  |  |        |        |        |
| Dimensions (H x W x D, mm)                    | 460 x 360 x 160  |  |        |        |        |
| Weight (kg)                                   | 17   |  |        |        |        |
| DC Terminal                                   | MC4  | BC03A,BC03B (PV-CF-S2, 5-6 (+)...; PV-CM-S2, 5-6 (-)..., Helios H4 2.5 mm <sup>2</sup> |        |        |        |
| Installation                                  | Wall mounting  |  |        |        |        |
| <b>DISPLAY AND COMMUNICATION</b>              |  |  |        |        |        |
| Display                                       | LED Display (standard) / LCD (Optional)  |  |        |        |        |
| System Language                               | English, German, Dutch   |  |        |        |        |
| Communication Mode                            | RS485 + WiFi (Standard), Ethernet (Optional)   |  |        |        |        |