



GRID-TIED INVERTER AS-IR01 SERIES



0.75 kW TO 5 kW GRID-TIED SINGLE-PHASE INVERTER, 1 MPPT

AEG AS-IR01 inverters belong to a new generation of PV string inverters specifically developed for residential systems.



COMPACT DESIGN AND EFFICIENCY FOR SMALL-AND MEDIUM-SIZE INSTALLATIONS

Compact size, light weight, low starting voltage and high conversion efficiency make of AS-IR01 an ideal choice for small- and medium size installations



EASY OPERABILITY AND ALL-ROUND MONITORING

AEG AS-IR01 features a global, integrated monitoring and management systems supporting a wide range of portable devices for easy operability

COMPREHENSIVELY CERTIFIED

AEG products and production facilities are compliant with the the latest standards to guarantee safety and reliability. Production facilities comply with ISO 9001, ISO 14001 and OHSAS 18001. AEG inverters are certified a.o. IEC 62109-1/2, EN 61000-6-2/3, VDE 0126-1-1, VDE-AR-N 4105, VDE0124, C10/11. The products are tested by independent, acknowledged institutions, among others by:



YOUR ADVANTAGE AT A GLANCE

Wide voltage range for small & medium scale plants
Compact size, easy operation, global monitoring
Combining RS485 + WiFi
Comprehensive certification range for the international markets
10 years Product warranty (15/20 years optional)

INPUT (DC)	750	1000	1500	2000	3000	4000	4600	5000
Max. DC Input power (W)	900	1200	1700	2200	3300	4800	5520	6000
Max. DC Input Voltage (V)	400	450	450	450	500	600	600	600
Starting Voltage / Min. Operation Voltage (V)	60/50	80/60	80/60	80/60	80/60	120/100	120/100	120/100
MPPT Operating Voltage Range (V)	50-400	60-400	80-410	100-410	120-450	120-550	120-550	120-550
Number of MPPT / String per MPPT	1/1	1/1	1/1	1/1	1/1	1/2	1/2	1/2
Max. DC Current (A) per MPPT x Nr. of MPPT	8 x 1	9 x 1	10 x 1	12 x 1	15 x 1	16 x 1	18 x 1	20 x 1
DC Switch	Yes							

OUTPUT (AC)

Rated Output Power (W)	750	1000	1500	2000	3000	3680	4200	4600
Max. AC Output Current (A)	3.6	4.5	6.5	9	13	16	18.3	20
Grid Voltage Range	230 / 180-277V							
Grid Frequency Range	50 Hz (44-55 Hz)							
Power Factor	≥0.99 (at rated power)							
THDi	<3% (at rated power)							
AC Output	Single-phase (L, N, PE)							

SYSTEM

Cooling	Natural cooling							
Max. Efficiency (%)	96.80	96.90	97.20	97.20	97.30	97.70	97.70	97.80
Euro-Efficiency (%)	95.95	96.00	96.10	96.10	96.50	96.50	96.70	96.80
MPPT Efficiency (%)	99.90							
Protection Rating	IP65							
Self-Consumption at Night (W)	<1							
Topology	Transformerless							
Operating Temperature	-25°C ~ +60°C (derate after 45°C)							
Relative Humidity	0 ~+95%, no condensation							
Protection	PV array insulation protection, PV array leakage current protection, Ground fault monitoring, Grid monitoring, Island protection, DC monitoring, Short current protection							

MECHANICAL PARAMETERS

Dimensions (H x W x D, mm)	280 x 300 x 138	405 x 360 x 150
Weight (kg)	≤9.5	≤16
DC Terminal	BC03A, BC03B (PV-CF-S2, 5-6 [+]; PV-Cm-S2, 5-6 [-] ...; Helios H4 2.5 mm ²)	
Installation	Wall mounting	
Grid Standards	DIN VDE 0126-1-1:2013; VDE-AR-N 4105:2011; DIN VDE V 0124-100:2012; C10/11	
Safety certificates / EMC category	IEC 62109-1:2010; IEC 62109-2:2011; EN 61000-6-2:2005; EN 61000-6-3/A1:2011	

DISPLAY AND COMMUNICATION

Display	LED (Standard); LCD (Optional)
System Language	English, German, Dutch
Communication Mode	RS485 + WiFi (Standard), Ethernet (Optional)

WARRANTIES

Product warranty	10 years (optional: 15/20 years)
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