

AEG

GRID-TIED SOLAR INVERTERS



AS-IR02 / SINGLE-PHASE GRID-TIED SOLAR INVERTER

Characteristics

Power classes: 0.7 kW - 3 kW
single-phase, 1 MPPT
Matte black housing, compact size
RS485+WiFi

Product Name Code (PNC)

AS-IR02-700/-1000/1500/2000/2500/3000



Extra peace of mind

Extensive certifications and Quality Control
5+5 years product warranty
(optionally extendable to 15/20 years)

Advantages

Compact size and light weight
Sleek looks designed for residential installations
Global monitoring



AS-IR02 / SINGLE-PHASE GRID-TIED SOLAR INVERTER

TECHNICAL SPECIFICATIONS

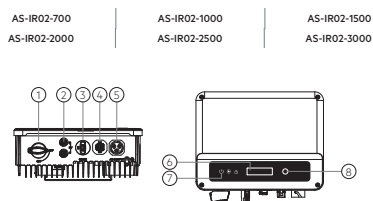
	AS-IR02-700	AS-IR02-1000	AS-IR02-1500
PV String Input Data			
Max. DC Input Power (W)	910	1300	1950
Max. DC Input Voltage (V)	500	500	500
MPPT Range (V)	40-450	40-450	50-450
MPPT Voltage Range at Nominal Power (V)	80-450	80-450	125-450
Start-up Voltage (V)	40	40	50
Nominal DC Input Voltage (V)	360	360	360
Max. Input Current per MPPT (A)	12.5	12.5	12.5
Max. Short Current per MPPT (A)	15.6	15.6	15.6
No. of MPPT	1	1	1
No. of Input Strings per MPPT	1	1	1
Max inverter backfeed current to the array (A)	0	0	0
AC Output Data			
Nominal Output Power (W)	700	1000	1500
Nominal Output Apparent Power (VA) [1]	700	1000	1500
Max. AC Active Power (W)	800	1100	1650
Max. AC Apparent Power (VA) [1]	800*	1100*	1650*
Nominal Output Voltage (V)	230	230	230
Nominal AC Grid Frequency (Hz)	50/60	50/60	50/60
Max. Output Current (A)	3.5	4.8	7.2
Max. Output Fault Current (peak and duration) (A/ms)	25/5	25/5	25/5
Inrush current (peak and duration) (A/ms)	50/2	50/2	50/2
Nominal Output Current (A)	3	4.3	6.5
Output Power Factor	-1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
Efficiency			
Max. Efficiency	97.2%	97.2%	97.3%
European Efficiency	96.0%	96.4%	96.6%
Protection			
DC Insulation Resistance Detection	Integrated		
Residual Current Monitoring Unit	Integrated		
Anti-islanding Protection	Integrated		
AC Overcurrent Protection	Integrated		
AC Short Circuit Protection	Integrated		
AC Overvoltage Protection	Integrated		
DC Switch	Integrated		
DC Surge Arrester	Type III		
AC Surge Arrester	Type III		
General Data			
Operating Temperature Range (°C)	-25-60		
Relative Humidity	0-100%		
Operating Altitude (m)	≤4000		
Cooling	Natural Convection		
User Interface	LCD & LED		
Communication	WiFi (optional: LAN or RS485)		
Communication Protocol	Modbus		
Weight (kg)	5.8		
Size (Width*Height*Depth mm)	295*230*113		
Noise Emission (dB)	25		
Topology	Transformerless		
Night Power Consumption (W)	<1		
Ingress Protection Rating	IP65		
DC Connector	MC4 (2.5-4 mm ²)		
AC Connector	Plug-and-play connector		
Environmental Category	4K4H		
Pollution Degree	III		
Overvoltage Category	DC II / AC III		
Protective Class	Class I		
Decisive Voltage Class (DVC)	C		
Certifications & Standards			
Grid Regulation & Safety Regulation	Visit www.aeg-industrialsolar.de for more information		

[1] *For Belgium Max. Output Apparent Power (VA): AS-IR02-700 is 700; AS-IR02-1000 is 1000; AS-IR02-1500 is 1500.

	AS-IR02-2000	AS-IR02-2500	AS-IR02-3000
PV String Input Data			
Max. DC Input Power (W)	2600	3250	3900
Max. DC Input Voltage (V)	500	500	500
MPPT Range (V)	50-450	50-450	50-450
MPPT Voltage Range at Nominal Power (V)	165-450	205-450	245-450
Start-up Voltage (V)	50	50	50
Nominal DC Input Voltage (V)	360	360	360
Max. Input Current per MPPT (A)	12.5	12.5	12.5
Max. Short Current per MPPT (A)	15.6	15.6	15.6
No. of MPPT	1	1	1
No. of Input Strings per MPPT	1	1	1
Max inverter backfeed current to the array (A)	0	0	0
AC Output Data			
Nominal Output Power (W)	2000	2500	3000
Nominal Output Apparent Power (VA) [1]	2000	2500	3000
Max. AC Active Power (W)	2200	2750	3300
Max. AC Apparent Power (VA) [1]	2200*	2750*	3300*
Nominal Output Voltage (V)	230	230	230
Nominal AC Grid Frequency (Hz)	50/60	50/60	50/60
Max. Output Current (A)	9.6	12	14.3
Max. Output Fault Current (peak and duration) (A/ms)	25/5	30/5	30/5
Inrush current (peak and duration) (A/ms)	50/2	50/2	50/2
Nominal Output Current (A)	8.7	10.95	13.0
Output Power Factor	-1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
Efficiency			
Max. Efficiency	97.5%	97.6%	97.6%
European Efficiency	97.0%	97.2%	97.2%
Protection			
DC Insulation Resistance Detection	Integrated		
Residual Current Monitoring Unit	Integrated		
Anti-islanding Protection	Integrated		
AC Overcurrent Protection	Integrated		
AC Short Circuit Protection	Integrated		
AC Overvoltage Protection	Integrated		
DC Switch	Integrated		
DC Surge Arrester	Type III		
AC Surge Arrester	Type III		
General Data			
Operating Temperature Range (°C)	-25-60		
Relative Humidity	0-100%		
Operating Altitude (m)	≤4000		
Cooling	Natural Convection		
User Interface	LCD & LED		
Communication	WiFi (optional: LAN or RS485)		
Communication Protocol	Modbus		
Weight (kg)	5.8		
Size (Width*Height*Depth mm)	295*230*113		
Noise Emission (dB)	42		
Topology	Transformerless		
Night Power Consumption (W)	<1		
Ingress Protection Rating	IP65		
DC Connector	MC4 (2.5-4 mm ²)		
AC Connector	Plug-and-play connector		
Environmental Category	4K4H		
Pollution Degree	III		
Overvoltage Category	DC II / AC III		
Protective Class	Class I		
Decisive Voltage Class (DVC)	C		
Certifications & Standards			
Grid Regulation & Safety Regulation	Visit www.aeg-industrialsolar.de for more information		

[1] *For Belgium Max. Output Apparent Power (VA): AS-IR02-2000 is 2000; AS-IR02-2500 is 2500; AS-IR02-3000 is 3000.

TECHNICAL DRAWINGS



Nr.	Item	Description
1	DC Switch	During normal operation it is „on“. It can shut down the inverter after it is disconnected from the grid by the AC breaker
2	PV Input Terminal	For PV string connection
3	WiFi/LAN Module Port	For WiFi/LAN communication
4	CT /Remote Shutdown/ RS485 Communication Port	For CT and & Remote Shutdown & RS485 Communication

4	CT /Remote Shutdown/ RS485 Communication Port	For CT and & Remote Shutdown & RS485 Communication
5	AC Output Terminal	For AC cable connection
6	LCD Display	For viewing inverter operation data and for parameter configuration
7	Indicator Lights	Displays the inverter state
8	Button	For accessing the inverter menu and parameter configuration

CONTACT US

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Version 2022.05.V1-EN © Solar Solutions Group.

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