

# AEG

## HYBRID SOLAR INVERTER



AS-ICH02-2/HV / HIGH VOLTAGE HYBRID SOLAR INVERTER

### Characteristics

Power classes: 5 kW - 10 kW  
Three-phase, 2 MPPT  
Matte black housing, RS485+WiFi

### Product Name Code (PNC)

AS-ICH02-5000/6500/8000/10000-2/HV

### Extra peace of mind

Extensive certifications and Quality Control  
5 years product warranty  
(optionally extendable to 10/15/20 years)

### Advantages

Sleek looks, quiet operation (fanless design)  
Smart load control and peak shaving  
Integrated option for AEG High Voltage Battery connection  
Built-in Type II SPD (DC side) and IP66 for extra reliability

## AS-ICH02-2/HV / HIGH VOLTAGE HYBRID SOLAR INVERTER

PRODUCT SERIES	
AEG HYBRID INVERTER	

PRODUCT NAMECODE (PNC)	
AS-ICH02-5000/6500/8000/10000-2/HV	

TECHNICAL DATA				
MODEL: AS-ICH02-XXX-2/HV (XXX=...)	5000	6500	8000	10000

MODEL: AS-ICH02-XXX-2/HV (XXX=...)				
	5000	6500	8000	10000

BATTERY INPUT DATA					
Battery Type	Li-Ion				
Nominal Battery Voltage	[V]	500			
Battery Voltage Range	[V]	180 - 600			
Max. Continuous Charging Current	[A]	25			
Max. Continuous Discharging Current	[A]	25			
Max. Charging Power	[W]	7500	8450	9600	10000
Max. Discharging Power	[W]	7500	8450	9600	10000

AC OUTPUT DATA (ON-GRID)					
Nominal Apparent Power Output to Utility Grid	[VA]	5000	6500	8000	10000
Max. Apparent Power Output to Utility Grid <sup>2,4</sup>	[VA]	5500	7150	8800	11000
Max. Apparent Power from Utility Grid	[VA]	10000	13000	15000	15000
Nominal Output Voltage	[V]	400 / 380, 3L / N / PE			
Nominal AC Grid Frequency	[Hz]	50 / 60			
Max. AC Current Output to Utility Grid	[A]	8.5	10.8	13.5	16.5
Max. AC Current From Utility Grid	[A]	15.2	19.7	22.7	22.7
Power Factor		-1 (Adjustable from 0.8 leading to 0.8 lagging)			
Max. Total Harmonic Distortion	[A]	<3%			

PV STRING INPUT DATA					
Max. Input Power	[W]	7500	9700	12000	15000
Max. Input Voltage (V) <sup>1</sup>	[V]	1000			
MPPT Operating Voltage Range <sup>2</sup>	[V]	200 - 850			
Start-up Voltage	[V]	180			
Nominal Input Voltage	[V]	620			
Max. Input Current per MPPT	[A]	16			
Max. Short Circuit Current per MPPT	[A]	21.2			
Number of MPP Trackers		2			
Number of Strings per MPPT		1			

AC OUTPUT DATA (BACK-UP)					
Back-up Nominal Apparent Power	[VA]	5000	6500	8000	10000
Max. Output Apparent Power <sup>3</sup>	[VA]	5000 (10000@ 60sec)	6500 (13000@ 60sec)	8000 (16000@ 60sec)	10000 (16500@ 60sec)
Max. Output Current	[A]	8.5	10.8	13.5	16.5
Nominal Output Voltage	[V]	400 / 380			
Nominal Output Frequency	[Hz]	50 / 60			
Output THDv (@Linear Load)	[A]	<3%			

OPERATING CONDITIONS	
Operating Temperature Range (°C)	[°C] -35 - +60
Relative Humidity	0 - 95%
Max. Operating Altitude	[m] 4000
Cooling Method	Natural Convection
User Interface	LED, APP
Communication with BMS <sup>5</sup>	RS485, CAN
Communication with Meter	RS485
Communication with Portal	WiFi
Topology	Non-isolated
Self-consumption at Night <sup>6</sup>	[W] <15
Ingress Protection Rating	IP66
Mounting	Wall-mounted

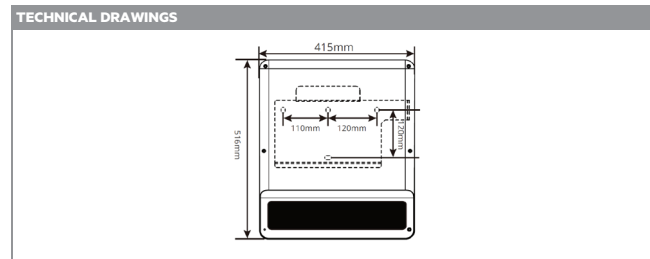
EFFICIENCY					
Max. Efficiency		98.0%	98.0%	98.2%	98.2%
European Efficiency		97.2%	97.2%	97.5%	97.5%
Max. Battery to AC Efficiency		97.5%	97.5%	97.5%	97.5%
MPPT Efficiency		99.9%	99.9%	99.9%	99.9%

PHYSICAL CHARACTERISTICS	
Height	[mm] 516
Width	[mm] 415
Depth	[mm] 180
Weight	[kg] 24

PROTECTION	
PV Insulation Resistance Detection	Integrated
Residual Current Monitoring	Integrated
PV Reverse Polarity Protection	Integrated
Anti-islanding Protection	Integrated
AC Overcurrent Protection	Integrated
AC Short Circuit Protection	Integrated
AC Overvoltage Protection	Integrated
DC Switch	Integrated
DC Surge Protection	Type II
AC Surge Protection	Type III
Remote Shutdown	Integrated

WARRANTY <sup>7</sup>	
Product warranty	5 years

CERTIFICATIONS	
EN 50549, DIN V VDE 126-1-1:2006-02, IEC 61727:2004, IEC 62116:2014, IEC 62109-1:2010, IEC 61209-2:2011, Synergrid/C10/C11. Further information: <a href="http://www.aeg-industrialsolar.de">www.aeg-industrialsolar.de</a>	



NOTES	
1-For 1000V system, maximum operating voltage is 950V   2-According to the local grid regulation   3-Can be reached only if PV and battery power is enough.	
4-For Belgium, max. output apparent power (VA): AS-ICH02-5000-2/HV is 5000, AS-ICH02-6500-2/HV is 6500, AS-ICH02-8000-2/HV is 8000, AS-ICH02-10000-2/HV is 10000.	
5-CAN communication is configured default. If RS485 communication is used, please replace the corresponding communication line.	
6-No back-up output   7- For the full Warranty Terms please visit <a href="http://www.aeg-industrialsolar.de">www.aeg-industrialsolar.de</a>   Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (+0,079 °)	
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