

AEG

HYBRID SOLAR INVERTER



AS-ICH12-X/HV / HIGH VOLTAGE HYBRID SOLAR INVERTER

Characteristics



Power classes: 6 kW - 15 kW
Three-phase, 2/3 MPPT
Metal black housing, RS485+WiFi+LAN (4G optional)

Product Name Code (PNC)



AS-ICH12-6000/8000-2/HV
AS-ICH12-10000/12000/15000-3/HV

Extra peace of mind



Extensive certifications and Quality Control
10 years product warranty

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 & AC side) and IP66 for extra reliability



AS-ICH12-X/ HV / HIGH VOLTAGE HYBRID SOLAR INVERTER

PRODUCT SERIES
AEG HYBRID INVERTER

PRODUCT NAMECODE (PNC)
AS-ICH12-6000/8000-2/HV
AS-ICH12-10000/12000/15000-3/HV

TECHNICAL DATA											
MODEL: AS-ICH12-XXX-X/HV (XXX=...)	6000	8000	10000	12000	15000	MODEL: AS-ICH12-XXX-X/HV (XXX=...)	6000	8000	10000	12000	15000

BATTERY INPUT DATA						
Battery Type	Li-Ion					
Nominal Battery Voltage	[V]	500				
Battery Voltage Range	[V]	150 – 720				
Max. Continuous Charging Current	[A]	30	30	40	40	40
Max. Continuous Discharging Current	[A]	30	30	40	40	40
Max. Charging Power	[W]	9000	12000	15000	18000	24000
Max. Discharging Power	[W]	6600	8800	11000	13200	16500
Number of Battery Input		1				

PV STRING INPUT DATA						
Max. Input Power	[W]	9600	12800	16000	19200	24000
Max. Input Voltage (V) ¹	[V]	1000				
MPPT Operating Voltage Range ²	[V]	120 – 850				
Start-up Voltage	[V]	150				
Nominal Input Voltage	[V]	620				
Max. Input Current per MPPT	[A]	16				
Max. Short Circuit Current per MPPT	[A]	24				
Number of MPP Trackers		2		3		
Number of Strings per MPPT		1				

OPERATING CONDITIONS			
Operating Temperature Range (°C)	[°C]	-35 ~ +60	
Relative Humidity		0 ~ 100%	
Max. Operating Altitude	[m]	4000	
Cooling Method		Natural Convection	
User Interface		LED, WLAN+APP	
Communication with BMS ⁵		RS485, CAN	
Communication with Meter		RS485	
Communication with Portal		LAN (4G optional) + Bluetooth + WiFi	
Topology		Non-isolated	
Self-consumption at Night ⁶	[W]	<15	
Noise Emission	[dB]	<30	<45
Ingress Protection Rating		IP66	
Mounting		Wall-mounted	

PHYSICAL CHARACTERISTICS			
Height	[mm]	460	
Width	[mm]	496	
Depth	[mm]	221	
Weight	[kg]	23	25

WARRANTY⁷	
Product warranty	10 years



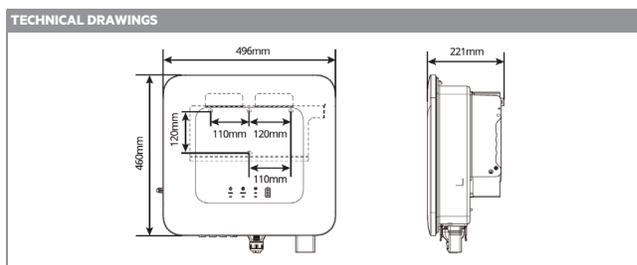
AC OUTPUT DATA (ON-GRID)						
Nominal Apparent Power Output to Utility Grid	[VA]	6000	8000	10000	12000	15000
Max. Apparent Power Output to Utility Grid ^{2a}	[VA]	6000	8000	10000	12000	15000
Max. Apparent Power from Utility Grid	[VA]	12000	16000	20000	20000	20000
Nominal Output Voltage	[V]	400 / 380, 3L / N / PE				
Nominal AC Grid Frequency	[Hz]	50 / 60				
Max. AC Current Output to Utility Grid	[A]	8.7	11.6	14.5	17.4	21.7
Max. AC Current From Utility Grid	[A]	15.7	21	26.1	26.1	26.1
AC Grid Frequency Range	[Hz]	45 ~ 65				
Power Factor		-1 (Adjustable from 0.8 leading to 0.8 lagging)				
Max. Total Harmonic Distortion	[A]	<3%				
Output Voltage Range*	[V]	170 ~ 290				

AC OUTPUT DATA (BACK-UP)						
Back-up Nominal Apparent Power	[VA]	6000	8000	10000	12000	15000
Max. Output Apparent Power ³	[VA]	6000 (12000@ 60sec)	8000 (16000@ 60sec)	10000 (18000@ 60sec)	12000 (18000@ 60sec)	15000 (18000@ 60sec)
Max. Output Current	[A]	13	17.4	21.7	21.7	21.7
Nominal Output Voltage	[V]	400 / 380				
Nominal Output Frequency	[Hz]	50 / 60				
Output THDv (@Linear Load)	[A]	<3%				

EFFICIENCY						
Max. Efficiency		98.0%	98.0%	98.2%	98.2%	98.2%
European Efficiency		97.2%	97.2%	97.5%	97.5%	97.5%
Max. Battery to AC Efficiency		97.20%	97.5%	97.5%	97.5%	97.5%
MPPT Efficiency		99.50%	99.50%	99.50%	99.50%	99.50%

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 II
Remote Shutdown	Integrated
Battery Reverse Polarity Protection	Integrated
PV AFCI3.0	Integrated (Optional)

CERTIFICATIONS	
EN 50549-1, VDE 0124, VDE-AR-N 4105, IEC 61727, IEC 62116, Synergrid/C10/C11. Further information: www.aeg-solar.com	



NOTES	
1-For 1000V system, maximum operating voltage is 950V 12-According to the local grid regulation 1 3-Can be reached only if PV and battery power is enough.	
4-For Belgium, max. output apparent power (VA): AS-ICH12-6000-2/HV is 6000, AS-ICH12-8000-2/HV is 8000, AS-ICH12-10000-3/HV is 10000, AS-ICH12-12000-3/HV is 12000, AS-ICH12-15000-3/HV is 15000.	
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 www.aeg-solar.com Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079 ")	
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