

MH-MII

Series hybrid solar inverters

The Autarco MH-MII series inverters offer the safest and most reliable performance for residential PV and storage systems. This hybrid inverter is compatible with li-ion or lead-acid batteries, ensuring a versatile storage solution. Equipped with back-up power and advanced energy management functionality.

- + Max string input current 15A
- + Compatible with various Lithium-ion & lead-acid batteries
- + Uninterrupted power supply, 20ms reaction
- + Higher charge-discharge efficiency, improving the economic benefits
- + Off-grid back up and energy management functions
- + 5kW backup power to support more important loads

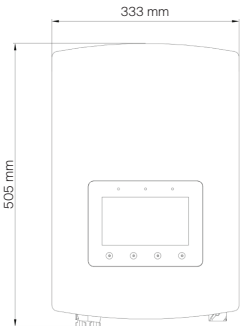


General characteristics

Dimensions (W x H x D)	333 x 505 x 249 mm
Net Weight	S2.MH(3000-3600)-MII: 17.9 kg
	S2.MH(4600-6000)-MII: 18.1 kg
Mounting	Wall bracket
Max. site altitude	3000m
IP protection class	IP65
Topology	High frequency isolation (for battery)
Cooling principle	Natural convection
Warranty	5 years, extendable to 15 years
Compatible battery types	Lithium-ion & Lead-acid
Display	7.0"LCD color screen display
Communication interfaces	1 x RS485, (Battery) 1 x CAN (Battery)
Optional interfaces	4G, WiFi and LAN (via 4-pin Connector)
DC / AC connection	MC4 / Quick connection plug
Safety / EMC Standards	IEC/EN 62109-1/-2, EN 61000-6-2/-3
Operating temperature range	-25°C to +60°C
Relative humidity range	0% to 100%



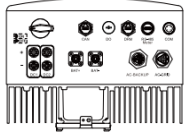
Front



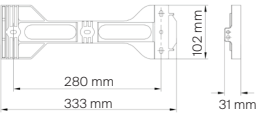
Side



Bottom



Bracket



PV Input characteristics

	S2.MH3000-MII	S2.MH3600-MII	S2.MH4600-MII	S2.MH5000-MII	S2.MH6000-MII*
Max. PV input power (W)	4800	5700	8000	8000	8000
Max. DC voltage (V)	600	600	600	600	600
Rated DC voltage (V)	330	330	330	330	330
MPP voltage range (V)	90-520	90-520	90-520	90-520	90-520
Start-up DC voltage (V)	120	120	120	120	120
Number of MPP trackers	2	2	2	2	2
Max. DC current per MPPT (A)	15	15	15	15	15
DC connections per MPPT	1	1	1	1	1
Max. short circuit current (A)	22.5	22.5	22.5	22.5	22.5

Battery

Battery voltage range (V)	42 - 58	42 - 58	42 - 58	42 - 58	42 - 58
Max. charge / discharge power (W)	3000	3000	5000	5000	5000
Max. charge / discharge current (A)	62.5	62.5	100	100	100
Communication	CAN	CAN	CAN	CAN	CAN
Battery capacity (Ah)	50 - 2000	50 - 2000	50 - 2000	50 - 2000	50 - 2000

Output characteristics

AC connection (V)	220 / 230	220 / 230	220 / 230	220 / 230	220 / 230
Power connection	1-phase	1-phase	1-phase	1-phase	1-phase
Rated AC power (W)	3000	3600	4600	5000	6000
Rated AC current (A)	13.7 / 13.1	16.4 / 15.7	20.9 / 20	22.8 / 21.7	27.3 / 26.1
Max. AC power (VA)	3300	4000	4600	5500 / 5000**	6600
Max. AC current (A)	15	18.5	21	25	30
Rated grid frequency (Hz)	50 Hz / 60 Hz				
Grid connection standards	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA				
Power factor	>0.99 (0.8 leading - 0.8 lagging)				
Harmonic distortion (%)	< 2%	< 2%	< 2%	< 2%	< 2%

Input AC (Grid side)

Max. input current (A)	20.5 / 20	25 / 23.5	31.5 / 30	34.5 / 33	34.5 / 33
Input voltage range (V)	187 - 265 V				
input frequency range	45-55 Hz / 55-65 Hz				

Output AC (Back-up)

Rated output power (W)	3000	3000	5000	5000	5000
Max. apparent output power (VA, 10 sec)	4500	4500	7000	7000	7000
Back-up switch time (ms)	< 20				
Rated output voltage	1/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Max. Rated output current (A)	14 / 13.5	14 / 13.5	23 / 22	23 / 22	23 / 22
THDv (@linear load)	<2%				

Efficiency

Max. efficiency	> 97.1%
EU efficiency	> 96.5%
Back-up switch time (ms)	< 20

* Not suitable for sale in Belgium

** Limited to 5000VA for Belgium

Note: The installing party is responsible for adhering to all local regulations.

The specifications contained in this datasheet may deviate slightly from our actual products due to on-going product improvement and are subject to change at any time without prior notice.

Protection

DC reverse-polarity protection	Integrated
Protection class/ Overvoltage category	I / II
Ground fault monitoring	Integrated
Integrated AFCI	Integrated
Short circuit protection	Integrated
Output over current protection	Integrated
Surge protection	DC Type II / AC Type II