






# LH series hybrid solar inverters

# autarco

The Autarco LH series hybrid inverters offer the best and most reliable performance in its class. These inverters combine a grid-tied 3-phase solar PV inverter with high voltage lithium-ion battery backup ensuring a versatile storage solution.

-  Eligible for Autarco's insured kWh Guarantee
-  Compatible with HV Lithium-ion batteries
-  Two independent MPP trackers
-  Extremely wide MPPT voltage range
-  Off-grid back up and energy management functions



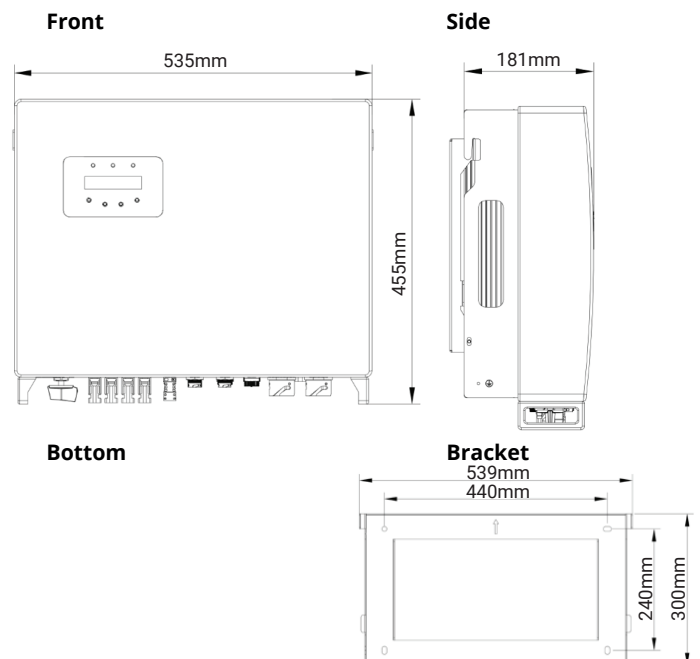
## QUALITY CERTIFICATES

- ◆ IEC/EN 62109-1/-2, IEC 61727, IEC 62116, IEC 62477-1
- ◆ EN 61000-6-2/-3
- ◆ EN50549-1, VDE-AR-N 4105, VDE 0126, RD647, CEI 0-21, C10/11



## GENERAL CHARACTERISTICS

<b>Warranty</b>	Standard 5 yrs. extendable to 15 yrs.
<b>Dimensions (W x H x D)</b>	535 x 455 x 181 mm
<b>Mounting</b>	Wall bracket
<b>Weight</b>	25.1 kg
<b>Max. site altitude</b>	4000m
<b>IP protection class</b>	IP65
<b>Topology</b>	Transformerless
<b>Cooling principle</b>	Natural convection
<b>Compatible battery types</b>	Lithium-ion
<b>LED indicators</b>	3
<b>LCD display</b>	2 x 20 characters
<b>Communication interfaces</b>	1 x RS485, (Battery) 1 x CAN (Battery)
<b>Optional interfaces</b>	WiFi, GPRS
<b>DC / AC connection</b>	MC4 / Quick connection plug



## PV INPUT CHARACTERISTICS

	S2.LH5000	S2.LH6000	S2.LH8000	S2.LH10000
Max. input PV power (W)	8000	9600	12800	16000
Max. input voltage (V)	1000	1000	1000	1000
MPPT voltage range (V)	200 - 850	200 - 850	200 - 850	200 - 850
Start-up DC voltage (V)	160	160	160	160
Number of MPP trackers	2	2	2	2
Max. DC current per MPPT (A)	13 / 13	13 / 13	26 / 13	26 / 26
DC connections per MPPT	2	2	4	4
DC connection type	MC4	MC4	MC4	MC4
Max. short circuit current (A)	19.5 / 19.5	19.5 / 19.5	39 / 19.5	39 / 19.5

## OUTPUT CHARACTERISTICS

AC connection	380 / 400 VAC	380 / 400 VAC	380 / 400 VAC	380 / 400 VAC
Power connection	3-phase	3-phase	3-phase	3-phase
Rated AC power (W)	5000	6000	8000	10000
Rated AC current (A) at 380V/400V	7.6 / 7.3	9.2 / 8.7	12.2 / 11.6	15.2 / 14.5
Max. AC power (W)	5500	6600	8800	10000
Max. AC current (A) at 380V/400V	8.4 / 8	10 / 9.7	13.4 / 12.9	16.7 / 14.7
Grid voltage range (V) & frequency range (Hz)	TBD			
Power factor	0.8...1...0.8	0.8...1...0.8	0.8...1...0.8	0.8...1...0.8
Harmonic distortion (%)	<2	<2	<2	<2
Cooling principle	Convection	Convection	Convection	Convection
Peak apparent output power for 60 seconds (W)	10000	12000	16000	16000

## BATTERY

Battery voltage range (V)	160 - 600	160 - 600	160 - 600	160 - 600
Max. charge / discharge power (W)	5000	6000	8000	10000
Max. charge / discharge current (A)	25	25	25	25
Communication	CAN	CAN	CAN	CAN

## EFFICIENCY

Max. efficiency	98.4 %
EU efficiency	97.7 %
Back-up switch time (ms)	<40
Battery charge / discharge efficiency	97.5 %
MPPT efficiency	99.9 %

## OTHER CHARACTERISTICS

Operating temperature range	-25°C to +60°C
Relative humidity range	0-100%

## PROTECTION

Anti-islanding protection	Integrated
PV over voltage protection	Integrated
Short circuit protection	Integrated
Output over current protection	Integrated
DC switch	Integrated
DC reverse-polarity protection	Integrated
Battery reverse protection	Integrated