LH

Series hybrid solar inverters

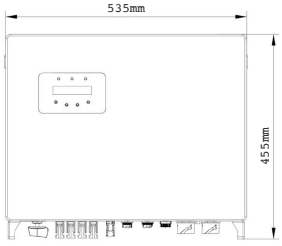
The Autarco LH series hybrid inverters offer the best and most reliable performance in its class. These inverters combine a grid-tied 3-phase solar PV inverter with high voltage lithium-ion battery backup ensuring a versatile storage solution.

+ 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

General characteristics

Dimensions (W x H x D)	535 x 455 x 185 mm
Net Weight	25,1kg
Mounting	Wall bracket
Max. site altitude	4000m
IP protection class	IP65
Topology	Transformerless
Cooling principle	Natural convection
Warranty	5 years, extendable to 15 years
Compatible battery types	Lithium-ion
LED indicators	3
LCD display	2 x 20 characters
Communication interfaces	1 x RS485, (Battery) 1 x CAN (Battery)
Optional interfaces	4G, WiFi, GPRS and LAN
DC / AC connection	MC4 / Quick connection plug
Safety / EMC Standards	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3

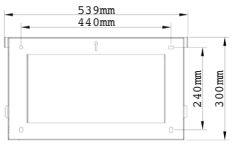
Front



Side

Bottom

Bracket



PV Input characteristics

	S2.LH5000	S2.LH6000	S2.LH8000	S2.LH10000
Max. PV input power (W)	8000	9600	128000	16000
Max. DC voltage (V)	1000	1000	1000	1000
Rated DC voltage (V)	600	600	600	600
MPP 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	1	1	2 / 1	2
Max. short circuit current (A)	16.5 / 16.5	16.5 / 16.5	32.5 / 16.5	32.5 / 32.5

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 380/400V	7.6 / 7.3	9.2 / 8.7	12.2 / 11.6	15.2 / 14.5
Max. apparent output power (VA)	5500	6600	8800	10000
Max. AC current (A) at 380V/400V	8.4	10	13.4	16.7
Rated grid frequency (Hz)	50 Hz / 60 Hz			
Grid connection standards	G98 of 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, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA			
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

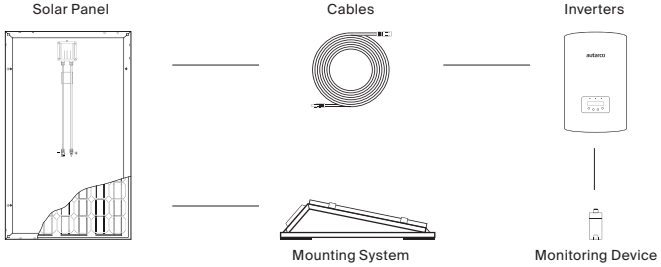
Max. efficiency	98.4%
EU efficiency	97.7%
Back-up switch time (ms)	< 40
Battery charge / discharge efficiency	97.5%
MPPT efficiency	99.9%

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

Other characteristics

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



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.