

# LQ Mark III

## Series solar inverters

The Autarco LQ series Mark III inverters offer the latest in grid tied inverter technology. The inverter is a key element in a solar PV power plant and these inverters provide the reliable basis for Autarco's unique kWh guarantee.

- + Eligible for Autarco's insured kWh Guarantee
- + Reduced Fire Risk due to Integrated AFCI
- + Two independent MPP trackers
- + Extremely wide MPPT voltage range
- + Waterproof IP65 enclosure



## Quality Certificates

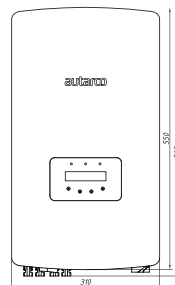
EN 50549-1, EN 61000-6-1/2/3/4 (CE), IEC 62109-1/2  
VDE 4105, VDE 0126, C10/11, NTS 631, RD 1699, RD 413



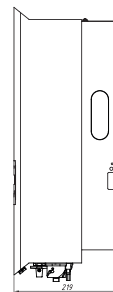
## General characteristics

<b>Dimensions (W x H x D)</b>	310 x 563 x 219mm
<b>Net Weight</b>	17.8 - 20kg
<b>Mounting</b>	Wall bracket
<b>Max. site altitude</b>	4000m
<b>IP protection class</b>	IP66
<b>Isolation type</b>	Transformerless
<b>Cooling principle</b>	Intelligent redundant fan-cooling
<b>Noise level, typically</b>	< 30dBA, < 60dBA with cooling fan
<b>Product guarantee</b>	5 year standard (10 & 15 year optional)
<b>Consumption monitoring</b>	Optional with meter
<b>Communication interfaces</b>	1 x RS485
<b>Monitoring Options</b>	WiFi, GPRS, 5G and Ethernet
<b>DC switch</b>	Integrated (optionally excluded)
<b>Power Export Limitation</b>	Integrated

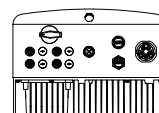
Front



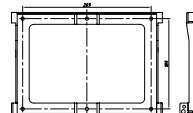
Side



Bottom



Bracket



# Input characteristics

	S2.LQ12000-MIII	S2.LQ13000-MIII	S2.LQ15000-MIII	S2.LQ17000-MIII	S2.LQ20000-MIII
Max. PV input power (W)	18000	19500	22500	25500	30000
Max. DC voltage (V)	1100	1100	1100	1100	1100
MPP tracker voltage range (V)	160-1000	160-1000	160-1000	160-1000	160-1000
Start-up DC voltage (V)	180	180	180	180	180
Number of MPP trackers	2	2	2	2	2
Max. DC current per MPPT (A)	32	32	32	32	32
Max. short circuit current (A)	50	50	50	50	50
Number of DC connections per MPPT	2	2	2	2	2
DC connection type	MC4	MC4	MC4	MC4	MC4
Turn on power (W)	10	10	10	10	10

# Output characteristics

	Plug-in	Plug-in	Plug-in	Plug-in	Plug-in
Power connection	3-phase	3-phase	3-phase	3-phase	3-phase
Rated AC power (W)	12000	13000	15000	17000	20000
Max. AC power (W)	13200	14300	16500	18700	22000
Rated Grid Voltage (V)	3P/N/PE, 220 V / 380 V, 230 V / 400 V				
Rated Grid Frequency (Hz)	50 Hz / 60 Hz				
Rated AC current (A)	18.2 / 17.3	19.8 / 18.8	22.8 / 21.7	25.8 / 24.6	30.4 / 28.9
Max. AC current (A)	19.1	20.7	23.8	27	31.8
Power factor	0.8...1...0.8	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%	< 2%
Night-time power consumption (W)	< 1	< 1	< 1	< 1	< 1
Standby power consumption (W)	6	6	6	6	6

# Efficiency

Max. efficiency	98.3 ~ 98.7%
EU efficiency	97.7 ~ 98.1%
MPPT efficiency	> 99.5%

# Other characteristics

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

# Protection

DC overvoltage protection	Integrated
DC reverse polarity protection	Integrated
Short circuit protection	Integrated
Grid monitoring	Integrated
Residual current detection	Integrated
Insulation resistance monitoring	Integrated
Temperature protection	Integrated
Islanding protection	Integrated
Arc-fault circuit interrupter	Integrated

