

## Technical Specifications

<b>Model</b>	<b>ST-AIO-S5.0</b>		
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### BATTERY

Battery type	Li-Ion		
Voltage Range[v]	160-350		
Recommended battery voltage[v]	300		
Nominal Energy(kWh)	5.5	8.3	11
DOD	95%		
Max. continuous charge/ discharge current [A]	25		
Communication interfaces	CAN/ RS485		
Reverse connect protection	YES		

### Input (DC)

Max. PV array power [Wp]	6600
Max. DC voltage [V]	580
Nominal DC operating voltage [v]	380
Max. input current [A]	12/12
Max. short circuit current [A]	14/14
MPPT voltage range [V]	70-580
Start operating voltage [V]	100

### Output (AC)

Nominal AC power [VA]	5000
Max. apparent AC power [VA]	5000
Nominal grid voltage (AC voltage range) [v]	220/230/240(180-270)
Nominal grid frequency/ range [Hz]	50/60
Nominal AC current [A]	21.7
Max. AC current [A]	21.7
Displacement power factor	0.8 leading to 0.8 lagging
THDi, rated power [%]	<2

### Input (AC)

Max. apparent AC power [VA]	10000
Max. AC current [A]	43.4
Nominal grid voltage (AC voltage range) [V]	220/230/240(180-270)
Nominal grid Frequency/ range [Hz]	50/60

### EPS Output (WITH BATTERY)

EPS Max. continuous apparent power [VA]	5000
EPS rated voltage [V], Frequency [Hz]	230, 50/60
EPS Max. continuous current [A]	26
EPS peak apparent power [VA]	6000
Changeover time [ms]	<200
THDv, linear Load [%]	<2

### Efficiency

PV Max. efficiency [%]	97.6
PV Europe Efficiency [%]	97
PV Max. MPPT efficiency [%]	99.9
Max. Battery charge efficiency (PV to BAT) [%]	98.2
Max. Battery charge efficiency (GRID to BAT) [%]	97.4
Max. Battery discharge efficiency (BAT to AC) [%]	97.5

### Power Consumption

Night Power Consumption [W]	<10
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### Protection

Over-voltage protection/Low-voltage protection	YES
Ground fault monitoring	YES
Grid monitoring	YES

### Standard

Safety	IEC62109-1/IEC62109-2/IEC62619
EMC	EN 61000-6-1/ EN 61000-6-2/ EN 61000-6-3
Certification	VDE-AR-N 4105 / AS4777 / EN50549 / CEI 0-21/G100

### Environment Limit

Degree of protection (according to IEC60529)	IP65
Operating temperature range [°C]	0-45*
Altitude (m) [m]	<2000
Humidity [%]	5-95%
Typical Noise Emission [dB]	<30

### Dimension And Weight

Dimensions (WxHxD) [mm]	640*1000*220	640*1300*220	640*1590*220
Weight [kg]	73	105	137
Cooling Method	Natural		
Topology	Transformerless		
Communication interfaces	Ethernet/ Meter/ Pocket WiFi (optional) / Pocket LAN (optional) / Pocket GPRS (optional) / DRM/ USB/ ISO alarm/ CT		
cycle life	12000**		

\* When the temperature is below 0 °C or above 40 °C, the performance will be limited.

\*\* Under specific test conditions