

# Inverter Specification

## Inverter General

	3.68kW	5kW
Max Recommended PV Power (per MPPT String)	2400W (per MPPT String)	3750W <sup>3</sup> (per MPPT String)
Max DC Voltage	580V	580V
Nominal Voltage	400V	400V
MPPT Voltage Range	80V - 560V	80V - 560V
Start Voltage	150V	150V
Number of MPP Tracker:	2	2
Strings per MPP Tracker:	1	1
Max Input Current MPPT:	15A / 15A	15A / 15A
Max Short-Circuit MPPT:	18A / 18A	18A / 18A

## AC Output

	3.68kW	5kW
Nominal AC Output Power	3680W	5000W
Max. AC Output Power	3680W	5000W <sup>1</sup>
Max. Output Current	16A	22A <sup>2</sup>
Max. AC Apparent Power	7360VA (from grid)	7360VA (from grid)
Nominal AC Voltage	230V AC	230V AC
AC Grid Frequency Range	50 / 60Hz +/-5Hz	50 / 60Hz +/-5Hz
Max. Input Current	32A	32A
Power Factor (cosΦ)	0.8 leading - 0.8 lagging	0.8 leading - 0.8 lagging
THDi	<3%	<3%

## Efficiency

	3.68kW	5 kW
Max PV Efficiency	97.6%	97.6%
Euro PV Efficiency	97.0%	97.0%

## General Spec

	3.68kW	5 kW
Dimensions WxHxD	540x590x240mm	540x590x240mm
Weight	32kg	32kg
Operating Temperature	-25 to +60°C*	-25 to +60°C*
Noise	<25dB	<25dB
Cooling Type	Natural Convection	Natural Convection
Max Operation Altitude	2000m	2000m
Max Operation Humidity	0-95% (No Condensation)	0-95% (No Condensation)
IP Class	IP65	IP65
Topology	Battery Isolation	Battery Isolation

## Battery Input

	3.68kW	5 kW
Max Charging Current	50A	100A
Max Discharging Current	80A	100A
Max Charge / Discharge Power (1 Battery Module)	2825/4000W	2825/4096W
Max Charge / Discharge Power (2-4 Battery Modules)	3000/4000W	4600/5000W
Battery Type	LFP (LiFeP04)	LFP (LiFeP04)
Nominal Battery Voltage	48V	48V
Charging Voltage Range	40-60V	40-60V
Battery Capacity	100-400Ah	100-400Ah
Charging Strategy for Li-ion Battery	Depends on BMS	Depends on BMS

## AC Output (Backup)

	3.68kW	5 kW
Max Output Apparent Power	4000VA	5000VA
Max Output Current	16A	20A
Peak Output Apparent Power	6900VA 10 sec	6900VA 10 sec
Nominal Output Voltage	230V	230V
Nominal Output Frequency	50 / 60Hz	50 / 60Hz
Output THDv (Linear Load)	<3% Linear Load	<3% Linear Load

## Protection

	3.68kW	5 kW
DC Switch	Bipolar DC Switch (125A/Pole)	Bipolar DC Switch (125A/Pole)
AC/DC Surge Protection	DC Type II, AC Type III	DC Type II, AC Type III
DC Reverse Polarity Protection	Yes	Yes
Output Over Current Protection	Yes	Yes
Anti-islanding Protection	Yes	Yes
String Fault Detection	Yes	Yes
Insulation Detection	Yes	Yes
AC Short Circuit Protection	Yes	Yes

## Compliance

IEC/EN62109-1/2; IEC/EN61000-6-1; IEC/EN61000-6-2; EN61000-6-3; IEC/EN61000-6-4.

## Grid Compliance

DIN VDE 0126-1-1; VDE-AR-N-4105; G98/G99; DIN VDE V 0124-100; DIN VDE 0126-1-1 VFR 2019; Synergrid C10/26

<sup>1</sup> The rated AC output power is 4600W for Germany.

<sup>2</sup> The maximum output current is 20A for Germany.

<sup>3</sup> Firmware update may be required. Requires Firmware Version ARM V2.3.08 and DSP V2.5.76 or later.

\*Derating above 45 °C