





# 5KW SINGLE PHASE HYBRID INVERTER


## FEATURES

 Max. efficiency 97.6% with ultra-low start-up voltage

 Fast and dynamic MPPT and industry leading DC voltage range

 Intelligent EMS function can use solar power 24/7 and lower you energy bills

 7 years standard warranty with extension options to 15 years.

 IP65 protection

 Remote upgrade



**STEALTH ENERGY**  
THE AFFORDABLE ENERGY THAT STANDS BY YOU

## Product parameters

Input(DC)	ST-INV-S5.0	ST-INV-S4.0	ST-INV-S3.68	ST-INV-S3.0
Max. PV power [Wp]	6000	5000	4600	4000
Max. DC input voltage [V]	550	550	550	550
Rated DC voltage [V]	360	360	360	360
Max. input current [A]	16/16	16/16	16/16	16/16
Max. short current [A]	20/20	20/20	20/20	20/20
MPPT voltage range [V]	125-530	125-530	125-530	125-530
Start-up voltage [V]	100	100	100	100
Number of MPPTs	2(1/1)	2(1/1)	2(1/1)	2(1/1)

### Input(AC)

Max. AC power [VA]	9200	5750	5750	5750
Max. AC current[A]	40	25	25	25
Rated grid voltage[V]	220/230/240(180-270)	220/230/240(180-270)	220/230/240(180-270)	220/230/240(180-270)
Rated grid frequency [Hz]	50/60	50/60	50/60	50/60

### Output(AC)

Max. AC power [VA]	4991	4000	3680	3000
Rated grid voltage [V]	220/230/240(180-270)	220/230/240(180-270)	220/230/240(180-270)	220/230/240(180-270)
Rated grid frequency [Hz]	50/60	50/60	50/60	50/60
Max. AC current [A]	21.7	17.4	16	13.1
Power factor	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging	0.8 leading~0.8 lagging
THDi[%]	<3	<3	<3	<3

### EPS Output (with battery)

EPS Max. power[VA]	4600	3800	3500	2900
EPS rated voltage [V], Frequency [Hz]	230, 50/60	230, 50/60	230, 50/60	230, 50/60
EPS Max. current[A]	20	16.6	15.3	12.6
THDv [%]	<3	<3	<3	<3

### Efficiency

MPPT efficiency[%]	99
European efficiency[%]	97
Max. efficiency[%]	97.6
Battery charge and discharge efficiency[%]	98.2/97.5

### Protection

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

### Environmental Limit

Ingress protection	IP65
Operating temperature range [°C]	-25~60 (derating >45)
Altitude [m]	<2000
Humidity [%]	0~100 (RH)
Storage temperature (°C)	-25~60
NI[dB]	<30

### Power Consumption

Night power consumption [W]	<10
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### Battery

Battery voltage range [V]	160-480
Max.charge/discharge current [A]	25
Communication interface	CAN/ RS485
Electronic protection	YES

### Standard and Certification

Safety	IEC62109-1/-2
EMC	IEC61000-6-2/ IEC61000-6-3
Grid regulation	VDE-AR-N 4105 / AS4777 / EN50549-1 / CEI 0-21 G98/G99/UNE217001/UNE217002/NTS/RD647 RD413/RD1699

### General Data

Dimensions (W*H*D) [mm]	411*505*192
Weight [kg]	19.3
Cooling method	Natural
Topology	Non-isolated
Interfaces	Meter/ WiFi / DRM/ BMS
Warranty [year]	7-15