Three Phase Hybrid/AC Inverter - Flexible, Compact and Powerful

High efficiency (EU 97%)

Lightweight and compact design

Easy installation and Minimize costs

IP65 water and dust proof

Smart cloud monitoring

Smart Energy Control

Technical Specifications

Model	SP R5KH3 SP R5KAC3	SP R6KH3 SP R6KAC3	SP R8KH3 SP R8KAC3	SP R10KH3 SP R10KAC3	SP R12KH3
INPUT PV (ONLY FOR HYBRID)					
Max. Input Power [W]	7500	9000	10400	13000	15000
Max. Input Voltage [V]			1000		
Start-up Input Voltage [V]			160		
Rated Input Voltage [V]			720		
MPPT Operating Voltage Range [V]			160-950		
Max. Input Current (A)	14/14	14/14	26/14	26/14	26/14
Max. Short-circuit Current [A]	16/16	16/16	32/16	32/16	32/16
No. of Independent MP Trackers		2	2	2	2
No. of Strings per MPP Tracker	1/1	1/1	2/1	2/1	2/1
BATTERY CONNECTION					
Battery Type			Lithium Battery (LFP)		
Battery Voltage Range(V)			150-600		
Max. Charge/Discharge Current (A)			26		
Communication Interface			CAN(Communicate with inverter), RS485 (Upgrade BMS)		
AC INPUT AND OUTPUT (GRID)					
Max. AC Input Power (VA)	10000	12000	16000	16000	16000
Max. AC Input Current (per phase) [A]	15.2	18.2	24.2	24.2	24.2
Rated Output Power [W]	5000	6000	8000	10000	12000
Max. Output Apparent Power (VA)	5500	6600	8800	11000	13200
Rated Output Current (per phase) [A]	7.2	8.7	11.6	14.5	17.4
Max. Output Current (A)	8.8	10.6	14.1	17.6	21.2
Rated Grid Voltage (V)			3L/N/PE 380/220; 400/230; 415/240		
Rated Grid Frequency (Hz)			50/60		
Power Factor			1 (Adjustable from 0.8 leading to 0.8 lagging)		
THDI			<3 @rated Dower		
EPS OUTPUT					
Max. Output Apparent Power [VA]	5000	6000	8000	10000	12000
Peak Output Apparent Power (60s) [VA]	10000	12000	14000	15000	15000
Max. Current (per phase) [A]	7.2	8.7	11.6	14.5	17.4
Rated Output Voltage [V]			31/N/PE 400/230		
Rated Output Frequency [Hz]			50/60		
Power Factor			1 (Adjustable from 0.8 leading to 0.8 lagging)		
THDv (linear Load)			<3%@Rated Power		
Switch time [ms]			<20		
EFFICIENCY					
Euro Efficiency	97.80%	97.80%	98.00%	98.00%	98.00%
Max. Efficiency	97.20%	97.20%	97.30%	97.30%	97.30%
Max. Battery Charge Efficiency (PV to BAT) (@full load)	98.50%	98.50%	98.50%	98.50%	98.50%
Max. Battery Discharge Efficiency(BAT to AC) (@full load)	97.00%	97.00%	97.00%	97.00%	97.00%
PROTECTION					
Insulation Monitoring			YES		
Residual Current Monitoring			YES		
DC Reverse Polarity Protection			YES		
Anti-islanding Protection			YES		
AC Short-circuit Protection			YES		
AC Overcurrent/Overvoltage Protection			YES		
DC Switch			YES		
SPD			DC: TypeII, /AC: Type II		
AFCI			Optional (Available in Q3,2022)		
GENERAL DATA					
Demensions (WxHxD) [mm]			449*519*198		
Weight (kg)			28.5		
Installation			Wall-Mounted		
Topology			Transformerless		
Cooling Method			Natural		Fan Cooling
Noise Emission (dB)			35		45
Max. Operating Altitude [m]			2000		
Operating Temperature Range (°C]			-25 to 60		
Humidity (No Condensation)			0% to 100%		
Protection Degree			IP65		
Standby consumption [W]			<15		
Monitoring Module			WiFi, LAN, 4G, GPRS (Optional)		
Communication			2*RS485, DRM, Ripple Control, USB		
Display			LCD, App, Website		

STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)	
Safety	EN 62109-1, EN 62109-2, EN 62477-1
EMC	IEC61000-6-1, IEC61000-6-3
Grid Regulation	VDE-AR-N 4105, CEI 0-21