R6 5-10K Single Phase On-Grid Inverter

R6 series is SAJ's mid- to high-output platform for on-grid solar inverters, offering excellent efficiency, optional AFCI, 110% AC overload protection, and a stable remote control connection. The R6 covers a range of 5-10kW, features 2 MPPTs, and is compatible with single-phase grid systems.

- AFCI (Integrated)
- String current up to 16A
- Max. efficiency 98.2%
- Built-in AC & DC SPD
- 110% AC overloading
- Safety & reliability

R6-5K-S2-X | R6-6K-S2-X | R6-7K-S2-X
R6-8K-S2-X | R6-9K-S2-X | R6-10K-S2-X

MODEL	R6-5K-S2-X	R6-6K-S2-X	R6-7K-S2-X	R6-8K-S2-X	R6-9K-S2-X	R6-10K-S2-X
DC Input						
Max. PV Array Power [Wp]@STC	7500	9000	10500	12000	12000	12000
Max. DC Voltage [V]	600					
MPPT Voltage Range [V]	90 ~ 550					
Rated DC Voltage [V]	360					
Start Voltage [V]	100					
Min. DC Voltage [V]	80					
Max. DC Input Current [A]	16/16					
Max. DC Short Circuit Current [A]	19.2/19.2					
No. of Strings per MPPT	1/1					
No. of MPPT	2					
DC Switch	Integrated					
AC Output						
Rated AC Power [W]	5000	6000	7000	8000	9000	10000
Max. Apparent Power*1 [VA]	5500	6600	7700	8800	9900	10000
Rated Output Current [A]@230Vac	21.7*2	26.1	30.4	34.8	39.1	43.5
Max. Output Current [A]	25	30	35	40	45	45.5
Rated AC Voltage/Range [V]	L+N+PE, 220,230,240/180 ~ 280					
Rated Output Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65					
Power Factor [cos φ]	0.8 leading ~ 0.8 lagging					
Total Harmonic Distortion [THDi]	<3%					
Efficiency						
Max. Efficiency	98.2%					
Euro Efficiency	97.8%					
Protection						
Internal Overvoltage Protection	Integrated					
DC Insulation Rsistance Detection	Integrated					
Grid Monitoring	Integrated					
GFCI Monitoring	Integrated					
DCI Monitoring	Integrated					
AC Short Circuit Current Protection	Integrated					
AC Grounding Detection	Integrated					
DC Surge Protection	Integrated					
AC Surge Protection	Integrated					
Anti-islanding Protection	Integrated					
AFCI Protection	Integrated					
Interface						
DC Connection	MC4/ H4					
AC Connection	Plug-in Connector					
Display	LED+APP					
Communication Port	RS232(USB)+RS485(RJ45)+DRM					
Communication	Wi-Fi/Ethernet/4G(Optional)					
Load Monitoring	24/7 (Optional)					
General Parameters						
Topology	Non-isolated					
Consumption at Night [W]	<1					
Operating Temperature Range	-40℃ to +60℃ (45℃ to 60℃ with derating)					
Cooling Method	Natural Convection					
Ambient Humidity	0-100% Non-condensing					
Altitude	4000m (>3000m Power Derating)					
Noise [dBA]	<35					
Ingress Protection	IP65					
Mounting	Wall Mounting					
Dimensions [H*W*D] [mm]	391*532*202					
Weight [kg]	16.5		17.3			
Warranty [Year]	5 /10/15/20					
Applicable Standard	EN 62109-1/2, EN 61000-6-1/2/3/4, EN 50438, EN 50549, C10/11, IEC 62116, IEC 61727, RD 1699, RD 413, UNE 206006, UNE 206007, NTS, CEI 0-16, CEI O-021, AS 4777.2, NBR 16149, NBR 16150 VDE-AR-N 4105, VDE 0126-1-1					

Remarks: *1 According to C10/C11, Max. Apparent Power= Rated AC Power *2 According to VDE-ARN-N 4105, Rated AC Current for R6-5K-S2-X is 20A