



R6 3-10K 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 3-10kW, features 3 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
- Max. 3 MPP trackers
- Safety & reliability

R6-3K-S3 | R6-5K-S3 | R6-6K-S3
R6-7K-S3 | R6-8K-S3 | R6-9K-S3 | R6-10K-S3

MODEL	R6-3K-S3	R6-5K-S3	R6-6K-S3	R6-7K-S3	R6-8K-S3	R6-9K-S3	R6-10K-S3
DC Input							
Max. PV Array Power [Wp]@STC	4500	7500	9000	10500	12000	13500	15000
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]				16/16/16			
Max. DC Short Circuit Current [A]				19.2/19.2/19.2			
No. of Strings per MPPT				1/1/1			
No. of MPPT				3			
DC Switch	Integrated						
AC Output							
Rated AC Power [W]	3000	5000	6000	7000	8000	9000	10000
Max. Apparent Power*1[VA]	3300	5500	6600	7700	8800	9900	10000
Rated Output Current [A]@230Vac	13.1	21.7*2	26.1	30.4	34.8	39.1	43.5
Max. Output Current [A]	15	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 Resistance Detection				Integrated			
DC Reverse Polarity Protection				Integrated			
Grid Monitoring				Integrated			
GFCI Monitoring				Integrated			
DCI Monitoring				Integrated			
AC Short Circuit Current Protection				Integrated			
AC Grounding Detection				Integrated			
DC Surge Protection				Type II			
AC Surge Protection				Type III (Type II optional)			
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°C to +60°C (45°C to 60°C 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]	17.3			18			
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, IEC 60068, IEC 61683, RD 1699, RD 413, UNE 206006, UNE 206007, NTS, CEI 0-16, CEI 0-21, 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-S3 is 20A