

R5 3-8K Single Phase On-Grid Inverter

The R5 series represents SAJ's advanced on-grid solar inverters, boasting high efficiency, optional AFCI, quiet heat emission, and a reliable remote control connection. Covering a range of 3-8kW, featuring 2 MPPTs, and designed for single-phase grid systems.



- Lightning protection, High precision leakage monitoring
- Low standby consumption High efficiency, high yield
- APP connection, All data at real time
- Remote maintenance, Remote configuration
- Quiet generation, No noise pollution
- Intelligent & grid-friendly, Active response to grid dispatch

R5-3K-S2-15 | R5-3.6K-S2-15
 R5-4K-S2-15 | R5-5K-S2-15
 R5-6K-S2-15 | R5-7K-S2-15 | R5-8K-S2-15

MODEL	R5-3K-S2-15	R5-3.6K-S2-15	R5-4K-S2-15	R5-5K-S2-15	R5-6K-S2-15	R5-7K-S2-15	R5-8K-S2-15
DC Input							
Max. PV Array Power [Wp]@STC	4500	5400	6000	7500	9000	10500	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]				15/15			30/15
Max. DC Short Circuit Current [A]				18/18			36/18
No. of Strings per MPPT				1/1			2/1
No. of MPPT				2			
DC Switch				Integrated			
AC Output							
Rated AC Power [W]	3000	3680	4000	5000	6000	7000	8000
Max. Apparent Power*1[VA]	3300	3680	4400	5500	6000	7700	8000
Rated Output Current [A]@230Vac	13.1	16.0	17.4	21.8*2	26.1	30.5	34.8
Max. Output Current [A]	14.4	16.0	19.2	23.9	26.1	33.5	34.8
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	97.8%	98.0%	98.0%	98.1%	98.2%	98.2%	98.3%
Euro Efficiency	97.2%	97.5%	97.5%	97.6%	97.6%	97.7%	97.8%
MPPT Efficiency	>99.9%						
Protection							
Internal Overvoltage Protection	Integrated						
DC Insulation Resistance 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						
Interface							
DC Connection				MC4/H4			
AC Connection				Plug-in Connector			Terminal Block
Display	LED+APP						
Communication Port	RS232(USB)+RS485(RJ45)+DRM						
Communication	Wi-Fi/Ethernet/4G(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]	<25						
Ingress Protection	IP65						
Mounting	Wall Mounting						
Dimensions [H*W*D] [mm]				389*367*143			429*418*177
Weight [kg]				12.2			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, RD 1699, RD 413, UNE 206006, UNE 206007, NTS, CEI 0-16, CEI 0-021, 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 R5-5K-S2-15 is 20A; According to AS4777.2, Rated AC Current for R5-5K-S2-15 is 21.7A