

R6 3-15K Three 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. This series covers a range of 3-15kW, features 2 MPPTs, and is compatible with three-phase grid systems.



- ☐ AFCI (Integrated)
- ☐ String current up to 16A
- ☐ Max. efficiency 98.6%
- ☐ Built-in AC & DC SPD
- ☐ 110% AC overloading
- ☐ Safety & reliability

R6-3K-T2 | R6-4K-T2 | R6-5K-T2 | R6-6K-T2
R6-8K-T2 | R6-10K-T2 | R6-12K-T2 | R6-15K-T2

MODEL	R6-3K-T2	R6-4K-T2	R6-5K-T2	R6-6K-T2	R6-8K-T2	R6-10K-T2	R6-12K-T2	R6-15K-T2
DC Input								
Max. PV Array Power [Wp]@STC	4500	6000	7500	9000	12000	15000	18000	22500
Max. DC Voltage [V]	1100							
MPPT Voltage Range [V]	160 ~ 950							
Rated DC Voltage [V]	600							
Start Voltage [V]	180							
Min. DC Voltage [V]	150							
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]	3000	4000	5000	6000	8000	10000	12000	15000
Max. Apparent Power ^{*1} [VA]	3300	4400	5500	6600	8800	11000	13200	15000
Rated Output Current [A]@230Vac	4.4	5.8	7.3	8.7	11.6	14.5	17.4	21.8
Max. Output Current [A]	5.0	6.7	8.4	10.0	13.4	16.7	20.0	22.8
Rated AC Voltage/Range [V]	3L+N+PE, 220/380, 230/400, 240/415; 180 ~ 280/ 312 ~ 485							
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%	98.5%	98.5%	98.5%	98.6%	98.6%	98.6%	98.6%
Euro Efficiency	97.8%	98.2%	98.2%	98.2%	98.3%	98.3%	98.4%	98.4%
Protection								
Internal Overvoltage Protection	Integrated							
DC Insulation Ristance 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°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*190							
Weight [kg]	15							
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