

R6 25-50K 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 25-50kW, features 4 MPPTs, and is compatible with three-phase grid systems.



- ☐ AFCI (Integrated)
- ☐ String current up to 16A
- ☐ Max. efficiency 98.8%
- ☐ Built-in AC & DC SPD
- ☐ 110% AC overloading
- ☐ Safety & reliability

R6-25K-T3-32 | R6-30K-T3-32 | R6-33K-T3-32
R6-36K-T3-32 | R6-36K-T4-32 | R6-40K-T4-32
R6-50K-T4-32

MODEL	R6-25K-T3-32	R6-30K-T3-32	R6-33K-T3-32	R6-36K-T3-32	R6-36K-T4-32	R6-40K-T4-32	R6-50K-T4-32
DC Input							
Max. PV Array Power [Wp]@STC	37500	45000	49500	54000	54000	60000	75000
Max. DC Voltage [V]				1100			
MPPT Voltage Range [V]				180 ~ 1000			
Rated DC Voltage [V]				600			
Start Voltage [V]				200			
Min. DC Voltage [V]				180			
Max. DC Input Current [A]	32/32/32					32/32/32/32	
Max. DC Short Circuit Current [A]	38.4/38.4/38.4					38.4/38.4/38.4/38.4	
No. of Strings per MPPT	2/2/2					2/2/2/2	
No. of MPPT	3					4	
DC Switch	Integrated						
AC Output							
Rated AC Power [W]	25000	30000	33000	36000	36000	40000	50000
Max. Apparent Power ^{*)} [VA]	25000	33000	36300	39600	39600	44000	50000
Rated Output Current [A]@230Vac	36.3	43.5*2	47.8	52.2	52.2	58	72.5
Max. Output Current [A]	37.9	50	55	60	60	66.7	75.8
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				98.8%			
Euro Efficiency				97.5%			
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				Intelligent Fan cooling			
Ambient Humidity				0~100% Non-condensing			
Altitude				4000m (>3000m Power Derating)			
Noise [dBA]				<50			
Ingress Protection				IP65			
Mounting				Wall Mounting			
Dimensions [H*W*D] [mm]				473*659.4*240			
Weight [kg]	35			37		37.5	
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 AS4777.2, Rated AC Current for R6-30K-T3-32 is 43.4A