

R6 25–50K Series Three Phase Inverter

R6 series is the SAJ's middle to high output platform on on-grid solar inverter, with good efficiency, AFCI optional, 110% AC overload and stable remote control connection. R6 covers 25–50kW, 4 MPPTs and three phase grid.



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

R6-25K-T4-32-AUS | R6-30K-T4-32-AUS
R6-33K-T4-32-AUS | R6-40K-T4-32-AUS | R6-50K-T4-32-AUS

MODEL	R6-25K-T4-32-AUS	R6-30K-T4-32-AUS	R6-33K-T4-32-AUS	R6-40K-T4-32-AUS	R6-50K-T4-32-AUS
DC Input					
Max. PV Array Power [Wp]@STC	37500	45000	49500	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				
Max. DC Short Circuit Current [A]	38.4/38.4/38.4/38.4				
No. of Strings per MPPT	2/2/2/2				
No. of MPPT	4				
DC Switch	Integrated				
AC Output					
Rated AC Power [W]	25000	29999	33000	40000	50000
Rated Apparent Power [VA]	25000	29999	33000	40000	50000
Max. Apparent Power [VA]	25000	29999	33000	40000	50000
Rated/Max. AC Output Current [A]	36.3	43.5	47.9	58	72.5
Current Inrush [A]	55.0				60.0
Max. AC Fault Current [A]	150.0				165.0
Max. AC Over Current Protection [A]	112.0				120.0
Rated AC Voltage/Range [V]	3+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	98.5%				
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	AFD				
AFCI Protection	Integrated				
Interface					
DC Connection	D4/MC4 (Optional)				
AC Connection	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	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]	36.5				37
Warranty [Year]	Refer to the warranty policy				
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				