



# R5

## SERIES

### SINGLE PHASE



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



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

Manufacturer: Guangzhou Sanjing Electric Co., Ltd.

| Model                                 | R5-3K-S2                                                                                                                                                        | R5-3.6K-S2 | R5-4K-S2 | R5-5K-S2 | R5-6K-S2 | R5-7K-S2       | R5-8K-S2 |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|----------|----------|----------------|----------|
| Input (DC)                            |                                                                                                                                                                 |            |          |          |          |                |          |
| Max. PV Array Power [Wp]@STC          | 4500                                                                                                                                                            | 5400       | 6000     | 7500     | 9000     | 10500          | 12000    |
| Max. Input Voltage [V]                | 600                                                                                                                                                             |            |          |          |          |                |          |
| MPPT Voltage Range [V]                | 90-550                                                                                                                                                          |            |          |          |          |                |          |
| Nominal Input Voltage [V]             | 360                                                                                                                                                             |            |          |          |          |                |          |
| Start-up Voltage [V]                  | 100                                                                                                                                                             |            |          |          |          |                |          |
| Min. Input Voltage [V]                | 80                                                                                                                                                              |            |          |          |          |                |          |
| Max. Input Current [A]                | 12.5/12.5                                                                                                                                                       |            |          |          |          | 25/12.5        |          |
| Max. DC Short Circuit Current [A]     | 15/15                                                                                                                                                           |            |          |          |          | 30/15          |          |
| No. of Strings per MPPT               | 1/1                                                                                                                                                             |            |          |          |          | 2/1            |          |
| No. of MPPT                           | 2                                                                                                                                                               |            |          |          |          |                |          |
| DC Switch                             | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| Output (AC)                           |                                                                                                                                                                 |            |          |          |          |                |          |
| Rated AC Output Power [W]             | 3000                                                                                                                                                            | 3680       | 4000     | 4999     | 6000     | 7000           | 8000     |
| Rated Apparent Power [VA]             | 3300                                                                                                                                                            | 3680       | 4400     | 5000     | 6000     | 7700           | 8000     |
| Rated AC Output Current [A]@230Vac    | 13.1                                                                                                                                                            | 16.0       | 17.4     | 21.7     | 26.1     | 30.5           | 34.8     |
| Max. AC Output Current [A]            | 15.0                                                                                                                                                            | 16.7       | 20.0     | 22.7     | 27.3     | 35.0           | 36.4     |
| Nominal AC Voltage/ Range [V]         | 220,230,240/180-280                                                                                                                                             |            |          |          |          |                |          |
| Nominal AC Grid Frequency/ Range [Hz] | 50,60 / 45-55,55-65                                                                                                                                             |            |          |          |          |                |          |
| Total Distortion Harmonic [THDi]      | <2%                                                                                                                                                             |            |          |          |          |                |          |
| Power Factor [cos ϕ]                  | 0.8 leading~0.8 lagging                                                                                                                                         |            |          |          |          |                |          |
| Feed-in                               | L+N+PE                                                                                                                                                          |            |          |          |          |                |          |
| 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 Accuracy                         | >99.9%                                                                                                                                                          |            |          |          |          |                |          |
| Protection                            |                                                                                                                                                                 |            |          |          |          |                |          |
| Internal Over-voltage Protection      | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| DC Insulation Monitoring              | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| DC Surge Protection                   | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| Grid Monitoring                       | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| AC Short Circuit Current Protection   | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| AC Grounding Detection                | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| GFCI Monitoring                       | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| DCI Monitoring                        | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| AC Surge Protection                   | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| Thermal Protection                    | Integrated                                                                                                                                                      |            |          |          |          |                |          |
| Anti-island Protection                | AFD                                                                                                                                                             |            |          |          |          |                |          |
| Interface                             |                                                                                                                                                                 |            |          |          |          |                |          |
| DC Connection                         | MC4                                                                                                                                                             |            |          |          |          |                |          |
| AC Connection                         | Plug-in Connector                                                                                                                                               |            |          |          |          | Terminal Block |          |
| Display                               | LED+(Bluetooth/Wi-Fi+APP)                                                                                                                                       |            |          |          |          |                |          |
| Communication Port                    | RS232(USB)+RS485(RJ45)                                                                                                                                          |            |          |          |          |                |          |
| Communication Mode                    | Wi-Fi/GPRS/4G(Optional)                                                                                                                                         |            |          |          |          |                |          |
| General Data                          |                                                                                                                                                                 |            |          |          |          |                |          |
| Topology                              | Transformerless                                                                                                                                                 |            |          |          |          |                |          |
| Consumption at Night [W]              | <0.2                                                                                                                                                            |            |          |          |          |                |          |
| Consumption at Standby [W]            | 6                                                                                                                                                               |            |          |          |          |                |          |
| Operating Temperature Range           | -40°C to +60°C                                                                                                                                                  |            |          |          |          |                |          |
| Cooling Method                        | Natural Convection                                                                                                                                              |            |          |          |          |                |          |
| Ambient Humidity                      | 0-100% Non-condensing                                                                                                                                           |            |          |          |          |                |          |
| Altitude                              | 4000m (>3000m Power Derating)                                                                                                                                   |            |          |          |          |                |          |
| Noise [dBA]                           | <25                                                                                                                                                             |            |          |          |          |                |          |
| Ingress Protection                    | IP65                                                                                                                                                            |            |          |          |          |                |          |
| Mounting                              | Rear Panel                                                                                                                                                      |            |          |          |          |                |          |
| Dimensions [H*W*D][mm]                | 389*367*143                                                                                                                                                     |            |          |          |          | 429*418*177    |          |
| Weight [kg]                           | 12.2                                                                                                                                                            |            |          |          |          | 18             |          |
| Warranty [Year]                       | 5 (standard)/10/15/20/25 (Optional)                                                                                                                             |            |          |          |          |                |          |
| Certifications                        | IEC62109-1/2, IEC61000-6-1/2/3/4, EN50438, C10/C11, IEC62116, IEC61727, RD1699, UNE 206006, UNE 206007, CEI 0-21, AS4777.2, NBR 16149, NBR 16150, VDE-AR-N 4105 |            |          |          |          |                |          |