

# On-grid Inverter



## R3 Max

100kW - 125kW / Three Phase, 9 MPPTs

**20A**

Max. PV input  
current



Optional AFCI & Smart  
PID recovery function



Export control  
function integrated

- ▶ 150% PV input oversizing & 110% AC overloading
- ▶ Type II SPD for both DC and AC
- ▶ IP66 outdoor design
- ▶ String monitoring and shorter O&M time

| Model                                   | R3-100K | R3-110K                                | R3-125K |
|---|---------|--|---------|
| <b>PV Input</b>                         |         |  |         |
| Max. Recommended PV Power [Wp]          | 150000  | 165000                                 | 187500  |
| Max. PV Input Voltage [V]               |         | 1100                                   |         |
| Rated PV Input Voltage [V]              |         | 650                                    |         |
| Start-up Voltage [V]                    |         | 200                                    |         |
| MPPT Voltage Range [V]                  |         | 200 ~ 1000                             |         |
| No. of MPP Trackers                     | 9       | 9                                      | 9       |
| No. of Input Strings per Tracker        | 2       | 2                                      | 2       |
| Max. PV Input Current per MPPT [A]      | 32      | 32                                     | 32      |
| Max. Short-circuit Current per MPPT [A] | 48      | 48                                     | 48      |
| <b>AC Output</b>                        |         |  |         |
| Rated AC Output Power [W]               | 100000  | 110000                                 | 125000  |
| Max. AC Output Apparent Power [VA]      | 110000  | 121000                                 | 125000  |
| Max. AC Output Current [A]              | 159.4   | 175.4                                  | 181.2   |
| Rated AC Voltage [V]                    |         | 3 / N / PE, 220 / 380, 230 / 400       |         |
| Grid Frequency [Hz]                     |         | 50 / 60                                |         |
| Adjustable Power Factor [cos φ]         |         | 0.8 leading ~ 0.8 lagging              |         |
| Output THDi (@Rated Output)             |         | < 3%                                   |         |
| <b>Efficiency</b>                       |         |  |         |
| Max. Efficiency                         | 98.7%   | 98.7%                                  | 98.7%   |
| Euro Efficiency                         | 98.3%   | 98.3%                                  | 98.3%   |
| <b>Protection</b>                       |         |  |         |
| DC Insulation Monitoring                |         | Integrated                             |         |
| Input Reverse Polarity Protection       |         | Integrated                             |         |
| Anti-island Protection                  |         | Integrated                             |         |
| Residual Current Monitoring             |         | Integrated                             |         |
| AC Overcurrent Protection               |         | Integrated                             |         |
| AC Short-circuit Protection             |         | Integrated                             |         |
| String Current Monitoring               |         | Integrated                             |         |
| DC Surge Protection                     |         | Integrated (Type II)                   |         |
| AC Surge Protection                     |         | Integrated (Type II)                   |         |
| AFCI Protection                         |         | Optional                               |         |
| PID Recovery Function                   |         | Optional                               |         |
| DC Switch                               |         | Integrated                             |         |
| <b>General Data</b>                     |         |  |         |
| Dimensions (W * H * D) [mm]             |         | 965 * 700 * 355                        |         |
| Weight [kg]                             | 88      | 88                                     | 88      |
| Display                                 |         | LED                                    |         |
| Communication                           |         | RS485 (Standard), WiFi                 |         |
| Ambient Temperature Range [°C]          |         | -30 ~ +60                              |         |
| Relative Humidity                       |         | 0 ~ 100%                               |         |
| Operating Altitude [m]                  |         | ≤ 4000                                 |         |
| Night Self-consumption [W]              |         | < 1                                    |         |
| Topology                                |         | Transformerless                        |         |
| Cooling                                 |         | Fan                                    |         |
| Ingress Protection                      |         | IP66                                   |         |
| <b>Certifications &amp; Standards</b>   |         |  |         |
| Grid Regulation                         |         | IEC 61727, IEC 62116, ORDINANCE No.140 |         |
| Safety Regulation                       |         | IEC 62109-1/2                          |         |
| EMC                                     |         | IEC 61000-6/2, IEC 61000-6/4           |         |