

On-grid Inverter



R1 Moto

8kW - 10kW / Single Phase, 2 MPPTs

16A

Max. PV input
current



Optional AFCI
protection function



Export control
function integrated

- ▶ 150% PV input oversizing
- ▶ Over-temperature protection
- ▶ Type II SPD for both DC and AC
- ▶ Remote firmware upgrade & setting

| Model | R1-8K | R1-10K |
|---------------------------------------|---------|--|
| PV Input | | |
| Max. Recommended PV Power [Wp] | 12000 | 15000 |
| Max. PV Power for single MPPT [Wp] | 6000 | 7500 |
| Max. PV Input Voltage [V] | | 600 |
| MPPT Voltage Range [V] | | 80 ~ 550 |
| Rated PV Input Voltage [V] | | 360 |
| Start-up Voltage [V] | | 100 |
| No. of MPP Trackers | 2 | 2 |
| No. of Input Strings per Tracker | 2 / 2 | 2 / 2 |
| Max. PV Input Current [A] | 32 / 32 | 32 / 32 |
| Max. Short-circuit Current [A] | 40 / 40 | 40 / 40 |
| AC Output | | |
| Rated AC Output Power [W] | 8000 | 10000 ^[1] |
| Max. AC Output Apparent Power [VA] | 8800 | 10000 ^[1] |
| Max. AC Output Current [A] | 40 | 45.5 ^[1] |
| Rated AC Voltage [V] | | L / N / PE, 220 / 230 |
| Grid Frequency [Hz] | | 50 / 60 |
| Adjustable Power Factor [cosφ] | | 0.8 leading ~ 0.8 lagging |
| Output THDi (@Rated Output) | | < 3% |
| Efficiency | | |
| Max. Efficiency | 98.1% | 98.1% |
| Euro Efficiency | 97.5% | 97.5% |
| Protection | | |
| 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 |
| DC Surge Protection | | Integrated (Type II) |
| AC Surge Protection | | Integrated (Type II) |
| AFCI Protection | | Optional |
| DC Switch | | Optional |
| General Data | | |
| Dimensions (W * H * D) [mm] | | 428 * 385 * 185 |
| Weight [kg] | | 17 |
| Display | | LED + OLED |
| Communication | | RS485, USB Update, Optional: Wifi, 4G, Ethernet |
| Ambient Temperature Range [°C] | | -25 ~ +60 |
| Relative Humidity | | 0 ~ 100% |
| Operating Altitude [m] | | ≤ 2000 |
| Night Self-consumption [W] | | < 1 |
| Topology | | Transformerless |
| Cooling | | Natural |
| Ingress Protection | | IP65 |
| Noise [dB] | | < 35 |
| Certifications & Standards | | |
| Grid Regulation | | ORDINANCE No.140 |
| Safety Regulation | | IEC 62109-1, IEC 62109-2, EN 62919-1, EN 62619-2 |
| EMC | | EN IEC 61000-6-1, EN IEC 61000-6-3 |

[1] The Max. AC output apparent power & Max. AC output current of R1-10K5 is 10500VA & 45.5A.