

On-grid Inverters

R1 Mini Series

1.1kW / 1.6kW / 2.2kW / 2.5kW / 2.7kW / 3kW / 3.3kW
Single Phase, 1 MPPT



PID recovery function



150% DC input oversizing



Type II SPD for both DC and AC



Optional AFCI & Smart PID recovery function



Low start-up voltage at 70V



Built-in zero export function



Model	R1-1K1	R1-1K6	R1-2K2	R1-2K5	R1-2K7	R1-3K	R1-3K3
PV Input Data							
Max. Recommended PV Power [Wp]	1650	2400	3300	3750	4050	4500	4950
Max. PV Input Voltage [V]	500			550			
MPPT Voltage Range [V]	45 ~ 500			50 ~ 550			
Rated Input Voltage [V]				360			
Start-up Voltage [V]				70			
No. of MPP Trackers				1			
No. of Input Strings per Tracker				1			
Max. PV Input Current [A]				16			
Max. Short-circuit Current per MPPT [A]				20			
AC Output Data							
Rated AC Power [W]	1100	1600	2200	2500	2700	3000	3300
Max. Output Power [VA]	1100	1600	2200	2500	2700	3000	3300
Max. AC Current [A]	5	7.3	10	11.4	12.3	13.6	15
Rated AC Voltage / Range [V]				L / N / PE, 220 / 230			
Grid Frequency / Range [Hz]				50 / 60; ± 5			
Adjustable Power Factor [cosφ]				0.8 leading ~ 0.8 lagging			
Output THDi (@Rated Output)				< 3%			
Efficiency							
Max. Efficiency	97.5%	97.5%	97.5%	97.5%	97.6%	97.6%	97.6%
Euro Efficiency	96.9%	96.9%	96.9%	96.9%	97.2%	97.2%	97.2%
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			
PID function				Optional			
DC Switch				Optional			
General Data							
Size (Width * Height * Depth) [mm]				290 * 220 * 119			
Weight [kg]				5.5			
User Interface				LED + OLED			
Communication				RS485 and USB (Standard), WiFi or 4G (Optional)			
Ambient Temperature Range [°C]				-25 ~ +60			
Relative Humidity				0 ~ 100%			
Operating Altitude [m]				≤ 2000			
Standby Self Consumption [W]				< 1			
Topology				Transformerless			
Cooling				Natural			
Protection Grades				IP65			
Noise [dB]				< 25			
Warranty [years]				5 / 7 / 10			
Certifications & Standards							
Grid Regulation				VDE0126-1, ORDINANCE 140, G98			
Safety Regulation				EN IEC61000-6-1, EN IEC61000-6-3			
EMC				EN IEC62109-1, EN IEC62109-2			