

Residential On-grid Inverter






R1 Mini Series

1.1kW / 1.6kW / 2.2kW / 2.5kW / 2.7kW / 3kW / 3.3kW



Features

Single Phase, 1 MPPT

-  Compatible with 500W+ PV modules
-  Optional AFCI protection function
-  150% PV input oversizing
-  Low start-up voltage at 70V
-  Type II SPD for both DC and AC
-  Built-in zero export function



Model	R1-1K1	R1-1K6	R1-2K2	R1-2K5	R1-2K7	R1-3K	R1-3K3	
PV Input								
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 PV 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 [A]				20				
AC Output								
Rated AC Output Power [W]	1100	1600	2200	2500	2700	3000	3300	
Max. AC Output Apparent Power [VA]	1100	1600	2200	2500	2700	3000	3300	
Max. AC Output Current [A]	5	7.3	10	11.4	12.3	13.6	15	
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	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				
DC Switch				Optional				
General Data								
Dimensions (W * H * D) [mm]	290 * 220 * 119							
Weight [kg]	5.5							
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]	< 25							
Certifications & Standards								
Grid Regulation	VDE 0126-1-1, G98, ORDINANCE No.140							
Safety Regulation	IEC 62109-1, IEC 62109-2, EN 62919-1, EN62619-2							
EMC	EN IEC 61000-6-1, EN IEC 61000-6-3							