

Residential On-Grid Inverters

R1 Mini Series



Compatible with 500W+ PV modules



150% PV input oversizing



Optional AFCI protection function



Remote firmware upgrade



Type II SPD for both DC and AC



Built - in zero export function

Model	R1-1K6	R1-2k7	R1-3k3
PV Input			
Max. Recommended PV Power [Wp]	2400	4050	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]	1600	2700	3300
Max. AC Output Apparent Power [VA]	1600	2700	3300
Max. AC Output Current [A]	7.3	12.3	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	97.50%	97.60%	97.60%
Euro Efficiency	96.90%	97.20%	97.20%
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		