

On-Grid Inverters

R1 Mini Series

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



Compatible with 500W+ PV modules



Optional AFCI protection function



150% DC 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 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 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 / Range [V]	L / N / PE, 220 / 230; 160 ~ 290						
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						
DC Switch	Optional						
General Data							
Dimensions (W * H * D) [mm]	290 * 220 * 119						
Weight [kg]	5.5						
Display	LED + OLED						
Communication	RS485, USB Upgrade, 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						