







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		
Full-load MPPT Voltage Range [V]	70 ~ 450	105 ~ 450	140 ~ 450	160 ~ 450	175 ~ 500	190 ~ 500	210 ~ 500
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 [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							
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	EN IEC 61000-6-1, EN IEC 61000-6-3						
EMC	EN IEC 62109-1, EN IEC 62109-2						