

Residential On-grid Inverter







R1 Mini Series

1.6kW / 2.7kW / 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	R1-1K6	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	97.5%	97.6%	97.6%
Euro Efficiency	96.9%	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	