

Residential On-grid Inverter

R1 Moto Series

8kW / 10kW / 10.5kW



Features

Single Phase, 2 MPPTs

-  Compatible with 500W+ PV modules
-  Optional AFCI protection function
-  150% PV input oversizing
-  Remote firmware upgrade
-  Type II SPD for both DC and AC
-  Built-in zero export function



Model	R1-8K	R1-10K	R1-10K5
PV Input			
Max. Recommended PV Power [Wp]	12000	15000	16000
Max. PV Power for single MPPT [Wp]	6000	7500	7500
Max. PV Input Voltage [V]	600		
MPPT Voltage Range [V]	80 – 550		
Rated PV Input Voltage [V]	360		
Start-up Voltage [V]	100		
No. of MPP Trackers	2	2	2
No. of Input Strings per Tracker	2 / 2	2 / 2	2 / 2
Max. PV Input Current [A]	32 / 32	32 / 32	32 / 32
Max. Short-circuit Current [A]	40 / 40	40 / 40	40 / 40
AC Output			
Rated AC Output Power [W]	8000	10000	10500
Max. AC Output Apparent Power [VA]	8800	10000	10500
Max. AC Output Current [A]	40	45.5	45.5
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	98.1%	98.1%	98.1%
Euro Efficiency	97.5%	97.5%	97.5%
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]	428 * 385 * 185		
Weight [kg]	17		
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]	< 35		
Certifications & Standards			
Grid Regulation	ORDINANCE No.140		
Safety Regulation	IEC 62109-1, IEC 62109-2, EN 62919-1, EN 62619-2		
EMC	EN IEC 61000-6-1, EN IEC 61000-6-3		