

Residential On-grid Inverter

# R1 Moto Series

8kW / 10kW



## 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
<b>PV Input</b>		
Max. Recommended PV Power [Wp]	12000	15000
Max. PV Power for single MPPT [Wp]	6000	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
No. of Input Strings per Tracker	2 / 2	2 / 2
Max. PV Input Current [A]	32 / 32	32 / 32
Max. Short-circuit Current [A]	40 / 40	40 / 40
<b>AC Output</b>		
Rated AC Output Power [W]	8000	10000 <sup>[1]</sup>
Max. AC Output Apparent Power [VA]	8800	10000 <sup>[1]</sup>
Max. AC Output Current [A]	40	45.5 <sup>[1]</sup>
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%
<b>Efficiency</b>		
Max. Efficiency	98.1%	98.1%
Euro Efficiency	97.5%	97.5%
<b>Protection</b>		
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
<b>General Data</b>		
Dimensions (W * H * D) [mm]		428 * 385 * 185
Weight [kg]		17
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]		< 35
<b>Certifications &amp; Standards</b>		
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

[1] The Max. AC output apparent power & Max. AC output current of R1-10K5 is 10500VA & 45.5A.