







On-Grid Inverters

R1 Moto Series

8kW / 10kW / 10.5kW
Single Phase, 2 MPPTs



-  Wider MPPT voltage range (100 ~ 550V)
-  Up to 98.1% max. efficiency
-  Remote firmware upgrade
-  IP65 outdoor design
-  150% DC input oversizing
-  Built-in zero export function



Model	R1-8K-DS	R1-10K-DS	R1-10K5-DS
PV Input			
Max. Recommended PV Power [Wp]	12000	15000	16000
Max. PV Power for Single MPPT [Wp]	7500 / 6000	7500 / 7500	7500 / 7500
Max. PV Input Voltage [V]		600	
MPPT Voltage Range [V]		100 ~ 550	
Rated PV Input Voltage [V]		360	
Start-up Voltage [V]		120	
No. of MPP Trackers		2	
No. of Input Strings per Tracker	2 / 1	2 / 2	2 / 2
Max. PV Input Current [A]	26 / 20	26 / 26	26 / 26
Max. Short-circuit Current [A]	33 / 26	33 / 33	33 / 33
DC Switch		Optional	
AC Output			
Rated AC Output Power [W]	8000	10000	10440
Max. AC Output Apparent Power [VA]	8800	10000	9570@220V; 10005@230V; 10440@240V
Max. AC Output Current [A]	38.5	43.5	43.5
Rated AC Voltage / Range [V]		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)		≤2%	
Efficiency			
Max. Efficiency	98.10%	98.10%	98.10%
Euro Efficiency	97.50%	97.50%	97.50%
General Data			
Dimensions (W * H * D) [mm]		395 * 330 * 185	
Weight [kg]		16	
Display		LCD	
Communication		RS485 or WiFi or 4G (Optional)	
Ambient Temperature Range [°C]		-25 ~ +60	
Relative Humidity		0 ~ 100%	
Operating Altitude [m]		≤2000	
Night Self-consumption [W]		<1	
Topology		Transformerless	
Cooling	Natural	Fan	Fan
Ingress Protection		IP65	
Noise [dB]	<25	<40	<40
Certifications & Standards			
Grid Regulation		IEC 61727, IEC 62116, IEC 60068, IEC 61683, ABNT NBR 16150	
Safety Regulation		IEC 62109-1, IEC 62109-2	
EMC	EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12, EN 61000-6-2, EN 61000-6-3, IEC 61000-4-16, IEC 61000-4-18, IEC 61000-4-29		
Protection			
	• DC Insulation Monitoring	• AC Overvoltage Protection	• Anti-island Protection
	• Residual Current Monitoring	• AC Overcurrent Protection	• Over-heat Protection
	• Input Reverse Polarity Protection	• AC Short-circuit Protection	• DC / AC Surge Protection