





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 Data			
Recommended Max. 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 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. Input Current per MPPT [A]	26 / 20	26 / 26	26 / 26
Max. Short-circuit Current per MPPT [A]	33 / 25	33 / 25	33 / 25
DC Switch	Optional		
AC Output Data			
Rated AC Power [W]	8000	10000	10440
Max. Apparent Power [VA]	8800	10000	9570@220V; 10005@230V; 10440@240V
Max. AC 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			
Size (Width * Height * Depth) [mm]	395 * 330 * 185		
Weight [kg]	16		
User Interface	LCD		
Communication	RS485 or Wifi or 4G (optional)		
Ambient Temperature Range [°C]	-25 ~ +60		
Relative Humidity	0 ~ 100%		
Operating Altitude [m]	≤ 2000		
Standby Self Consumption [W]	< 1		
Topology	Transformerless		
Cooling	Natural	Fan	Fan
Enclosure	IP65		
Noise [dB]	< 25	< 40	< 40
Warranty [years]	5 / 7 / 10		
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