


On-grid Inverters


R1 Moto Series

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




 Compatible with 500W+ PV modules

 Type II SPD for both DC and AC

 Remote firmware upgrade

 PID recovery function

 150% DC input oversizing

 Built-in zero export function



Model	R1-8K	R1-10K	R1-10K5
DC Input Data			
Max. Recommended PV Power [Wp]	12000	15000	16000
Max. PV power for single MPPT [W]	6000	7500	7500
Max. PV Input Voltage [V]		600	
MPPT Voltage Range [V]		80 – 550	
Rated Input Voltage [V]		360	
Start-up Voltage [V]		100	
No. of MPP Trackers		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 per MPPT [A]	40 / 40	40 / 40	40 / 40
AC Output Data			
Rated AC Power [W]	8000	10000	10500
Max. Output Power [VA]	8800	10000	10500
Max. AC Current [A]	40	45.5	45.5
Rated AC Voltage / Range [V]		L / N / PE, 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)		< 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	
PID function		Optional	
DC Switch		Optional	
General Data			
Size (Width * Height * Depth) [mm]		428 * 385 * 185	
Weight [kg]		16	
User Interface		LED + OLED	
Communication		RS485 and USB (Standard), Wifi or 4G (Optional) or Ethernet (Optional)	
Ambient Temperature Range [°C]		-25 ~ +60	
Relative Humidity		0 ~ 100%	
Operating Altitude [m]		≤ 2000	
Standby Self Consumption [W]		< 1	
Topology		Transformerless	
Cooling		Natural	
Protection Grades		IP65	
Noise [dB]		< 25	
Warranty [years]		5 / 7 / 10	
Certifications & Standards			
Grid Regulation	VDE 0126-1-1, C10/11, G99, PEA, MEA, AS 4777, EN 50549, CEI 0-21, 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		