

Residential On-grid Inverter


R1 Moto Series

7.5kW/ 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	R1-7K5	R1-8K	R1-10K	R1-10K5
PV Input				
Max. Recommended PV Power [Wp]	11250	12000	15000	16000
Max. PV Power for single MPPT [Wp]	6000	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	2
No. of Input Strings per Tracker	2 / 2	2 / 2	2 / 2	2 / 2
Max. PV Input Current [A]	32 / 32	32 / 32	32 / 32	32 / 32
Max. Short-circuit Current [A]	40 / 40	40 / 40	40 / 40	40 / 40
AC Output				
Rated AC Output Power [W]	7500	8000	10000	10500
Max. AC Output Apparent Power [VA]	7500	8800	10000	10500
Max. AC Output Current [A]	34.1	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%	98.1%
Euro Efficiency	97.5%	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 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			
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			