



	MAX.DC/AC RATIO UP TO 1.5
	10/12 MPPTs
	Smart I-V Curve Function
	DC & AC TYPE II SPD
	AFCI FUNCTION OPTIONAL
	1100Vdc, 400/500Vac

On-grid Inverters

R3 Max Series



120KW / 150KW
Three Phase, 10 / 12 MPPT

Renac R3 Max Series 120-150 kW three phase series string inverter adopt 10/12 MPPT design to provide a more flexible configuration scheme. The maximum input current of each string reach to 13A, which can be perfectly adapted to high power module to increase the power generation. Configuration can be easily done via Bluetooth. Smart I-V Curve Function, Night SVG Function, making the O&M easier.

Model	R3-120K	R3-150K-HV
DC Input Data		
Max. Recommended PV Power [Wp]	180000	225000
Max.DC Input Voltage [V]	1100	1100
MPPT voltage Range [V]	200 ~ 1000	200 ~ 1000
Rated Input Voltage [V]	620	780
Start-up Voltage [V]	250	250
No. of MPP Trackers	10	12
No. of Input Strings per Tracker	2	2
Max. DC Input Current Per MPPT [A]	26	26
Max.short-circuit current per MPPT [A]	40	40
DC Switch	Integrated	Integrated
AC Output Data		
Rated AC Power [kW]	120@25°C , 110@40°C , 100@50°C	150@25°C , 136@40°C , 120@50°C
Max.output power [VA]	121000	150000
Max. AC Current [A]	176.4	174.5
Rated AC Voltage / Range	3W+N+PE, 230 / 400Vac; 320 ~ 480V	3W+PE, 500Vac; 400 ~ 621V
Grid frequency / range [Hz]	50 / 60; ±5	50 / 60; ±5
Adjustable Power Factor [cosφ]	0.8leading ~ 0.8lagging	0.8leading ~ 0.8lagging
Output THDi(@Rated Output)	< 3%	< 3%
Efficiency		
Max.Efficiency	98.70%	99.00%
Euro Efficiency	98.30%	98.50%
MPPT Efficiency	99.90%	99.90%
General Data		
Size(Width*Height*Depth) [mm]	1055 × 700 × 336	1055 × 700 × 336
Weight [KG]	98	110
User Interface	LED Indicator, Bluetooth + APP	LED Indicator, Bluetooth + APP
Communication	RS485 (Standard), WiFi or GPRS	RS485 (Standard), WiFi or GPRS
Ambient Temperature Range [°C]	-25 ~ 60	-25 ~ 60
Relative Humidity	0 ~ 100%	0 ~ 100%
Operating Altitude [m]	≤ 4000	≤ 4000
Standby Self Consumption [W]	< 1	< 1
Topology	Transformerless	Transformerless
Cooling	Fan Cooling	Fan Cooling
Protection Grades	IP66	IP66
Noise [dB]	≤ 60	≤ 70
Warranty [years]	5 / 7 / 10	5 / 7 / 10
Certifications & Standards		
Grid Regulation	IEC61727, IEC62116	IEC61727, IEC62116
Safety Regulation	IEC 62109-1, IEC 62109-2	IEC 62109-1, IEC 62109-2
EMC	EN 61000-6-2, EN 61000-6-4	EN 61000-6-2, EN 61000-6-4
Protection		
* DC Insulation Monitoring	* Over-heat Protection	* DC Surge Protection
* Input Reverse Polarity Protection	* AC Overcurrent Protection	* AC Surge Protection
* Anti-island Protection	* AC Short-circuit Protection	* AC Surge Protection
* Residual Current Monitoring	* AC Overvoltage Protection	* AC Overvoltage Protection