

Low Voltage Hybrid Inverter



4kW - 8kW / Single Phase, 2 MPPTs

20A

Max. PV input current

< 10ms

Transfer time



Supports diesel generator
and smart load integration

- ▶ Supports AC coupling for easy system expansion
- ▶ 200% PV input oversizing
- ▶ Max. charging / discharging current up to 190A
- ▶ 10 seconds of 200% overload capability
- ▶ Remote firmware upgrade & setting

Model	RI-EF-LV-4K	RI-EF-LV-5K	RI-EF-LV-6K	RI-EF-LV-8K
PV Input				
Max. PV Access Power [Wp]	8000	10000	12000	16000
Max. PV Input Power [W]	6400	8000	9600	12800
Max. PV Input Voltage [V]			500	
MPPT Voltage Range [V]			90 ~ 450	
Rated PV Input Voltage [V]			300	
Start-up Voltage [V]			120	
No. of MPP Trackers			2	
No. of Input Strings per Tracker		1 / 1		2 / 2
Max. PV Input Current [A]		20 / 20		40 / 40
Max. Short-circuit Current [A]		25 / 25		50 / 50
AC Output				
Max. AC Output Apparent Power [VA]	4400	5500	6600	8800
Rated AC Output Power [W]	4000	5000	6000	8000
Max. AC Output Current [A]	20 / 19.1	25 / 24	30 / 28.7	40 / 38.3
Rated AC Output Current [A]	18.2 / 17.4	22.8 / 21.8	27.3 / 26.1	36.4 / 34.8
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%	
AC Input				
Max. AC input apparent power [VA]	8000	10000	12000	16000
Max. AC input current[A]	36.4 / 34.8	45.5 / 43.5	54.5 / 52.2	72.7 / 69.6
Rated AC Voltage [V]			L / N / PE, 220 / 230	
Grid Frequency [Hz]			50 / 60	
Battery				
Battery Type			Lead-acid/Lithium-ion	
Battery Voltage Range [V]			40 ~ 60	
Max. Charging / Discharging Current [A]	100	100	120	190
Communication Interface			CAN	
Backup Output (With Battery)				
Rated Output Power [W]	4000	5000	6000	8000
Rated Output Voltage [V]			L / N / PE, 220 / 230	
Rated Frequency [Hz]			50 / 60	
Rated Output Current [A]	18.2 / 17.4	22.8 / 21.8	27.3 / 26.1	36.4 / 34.8
Output THDV (@Liner Load)			<3%	
Automatic Switch Time [ms]			<10	
Load Motor Capacity	3HP		4HP	5HP
Efficiency				
Max. Efficiency			97.6%	
Euro Efficiency			97.0%	
MPPT Efficiency			>99%	
Protection				
DC Insulation Monitoring			Integrated	
Input Reverse Polarity Protection			Integrated	
Anti-island Protection			Integrated	
Residual Current Monitoring			Integrated	
Over-heat Protection			Integrated	
AC Overcurrent Protection			Integrated	
AC Overvoltage Protection			Integrated	
AC Short-circuit Protection			Integrated	
DC Surge Protection			Integrated (Type II)	
AC Surge Protection			Integrated (Type II)	
DC Switch			Integrated	
AFCI Protection			Optional	
General Data				
Num. of Parallel [units]			1 ~ 6	
Dimensions (W * H * D) [mm]			588 * 364 * 246.5	
Weight [kg]			27	
Display			LED + LCD	
Communication			RS485, CAN, Dry contact, Optional: WiFi or 4G or Ethernet	
Ambient Temperature Range [°C]			-30~+60 (Derating Above 45°C)	
Relative Humidity			0 ~ 100%	
Operating Altitude [m]			<2000	
Standby Self-consumption [W]			<15	
Topology			Non-isolated	
Cooling		Natural		Fan
Noise [dB]		<30		<50
Ingress Protection			IP65	
Certifications & Standards				
Grid Regulation			IEC 61727, IEC 62116, PEA, MEA	
Safety Regulation			IEC 62109-1, IEC 62109-2	
EMC			EN IEC 61000-6-1, EN IEC 61000-6-3, EN 62920	