

RI-ENERGYFLOW-3P-SERIES-25-R3



Product Description

The RI-ENERGYFLOW-3P-SERIES-25-R3 range forms part of an expanding **RENAC by RAYLEIGH** family of inverters from Rayleigh Instruments.

These inverters are ideal for three-phase residential and light commercial projects.

The range applies advanced topology and innovative control technology to achieve a maximum efficiency of 98.6% allowing maximum long-term returns and profitability for project owners. The maximum input current for each string is 20A, which is ideally suited to high power modules to increase power generation.

3 Phase On-Grid Inverters

- Available as 15kW, 20kW and 25kW
- Three Phase, 2 MPPT versions
- 40A Input current per MPPT
- Remote monitoring
- Compact Size
- 150% PV input over-sizing & 110% AC overloading
- Wide MPPT voltage range (180...1000V)
- Type II SDP for both DC and AC
- IP65 Rated
- Easy installation
- Integrated Export Control function
- G98 and G99 compliant
- Remote firmware upgrade and setting
- Optional AFCI protection function



DC Input (PV)

Model - RI-ENERGYFLOW-3P-SERIES-25-R3-	15K	20K	25K
Max. Recommended PV Power [Wp]	22500	30000	37500
Max. CD Power for Single MPPT [Wp]	8000	12000	15000
Max. DC Input Voltage [V]	1100		
MPPT voltage Range [V]	180...1000		
Rated Input Voltage [V]	600		
Start-up Voltage [V]	200		
No. of MPP Trackers	2		
No. of Input Strings per Tracker	2/2		
Max. DC Input Current [A]	40/40		
Max. short-circuit Current per MPPT [A]	50/50		

AC Output

Model - RI-ENERGYFLOW-3P-SERIES-25-R3-	15K	20K	25K
Rated AC Power [W]	15000	20000	25000
Max. output power [VA]	16500	22000	27500
Max. AC Current [A]	25	33.4	41.7
Rated AC Voltage / Range [V]	3 / N / PE, 220 / 380, 230 / 400		
Grid frequency / range [Hz]	50 / 60		
Adjustable Power Factor [cos Φ]	0.8 leading ~ 0.8 lagging		
Output THDi (@Rated Output)	<3%		

Efficiency

Model - RI-ENERGYFLOW-3P-SERIES-25-R3-	15K	20K	25K
Max. Efficiency	98.6%		
Euro Efficiency	98.2%		

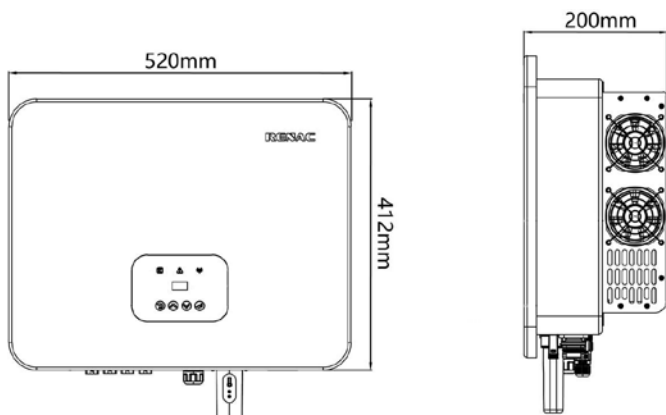
General Specifications

Model - RI-ENERGYFLOW-3P-SERIES-25-R3-	15K	20K	25K
Size (Width*Height*Depth) [mm]	520 x 412 x 200		
Weight [KG]	22		
User Interface	LED + OLED		
Communication	RS485, USB Update, Optional WiFi, 4G, Ethernet		
Ambient Temperature Range	-25...+60°C		
Relative Humidity	0 - 100%		
Operating Altitude [m]	≤ 2000		
Standby Self Consumption [W]	< 1		
Topology	Transformerless		
Cooling	Fan		
Protection Grades	IP65		
Warranty (conditions apply)	10 years		
Protection	DC Insulation Monitoring DC Isolator Switch Input Reverse Polarity Protection Anti-island Protection Residual Current Monitoring AC Overcurrent Protection AC Short-circuit Protection String Current Monitoring DC Surge Protection AC Surge Protection Optional AFCI Protection Optional PID Recovery Function		

Certification & Standards

Grid Regulation	EN50549-1, EN50549-PL, IEC61727/IEC82116, NB/T 32004, Ordinance No. 140, G98, G99
Safety Regulation	IEC 62619-1, IEC 62619-2
EMC	EN IEC 61000-6-1, EN IEC 61000-6-3, EN 62920, EN IEC 61000-3-11, EN IEC 61000-3-12

Dimensions (mm)



Model Selection Table

Description	Model
15kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-25-R3-15K
20kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-25-R3-20K
25kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-25-R3-25K