

RI-ENERGYFLOW-3P-SERIES-25

3 Phase On-Grid Inverters



- Available as 10kW, 15kW, 17kW, 20kW and 25kW
- Three Phase, 2 MPPT versions
- 37.5A Input current per MPPT
- Remote monitoring
- Compact Size
- 50% DC input oversizing
- Wide MPPT range (150...1000V)
- 110% 'Long-Time' overload capability
- IP65 Rated
- Easy installation
- Built-in zero export function (optional)
- G98, G99 and G100 compliant

Product Description

The RI-ENERGYFLOW-3P-SERIES-25 range forms part of an expanding 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 98.5% 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.

DC Input Data

Model - RI-ENERGYFLOW-3P-SERIES-25-	10KW	15KW	17KW	20KW	25KW
Max. Recommended PV Power [Wp]	15000	22500	25500	30000	37500
Max. DC Input Voltage [V]	1100				
MPPT voltage Range [V]	150...1000				
Rated Input Voltage [V]	630				
Start-up Voltage [V]	165				
No. of MPP Trackers	2				
No. of Input Strings per Tracker	1/1	2/1	2/2	2/2	2/2
Max. DC Input Current [A]	26/26	39/26	39/39	39/39	39/39
DC Switch	Integrated				

AC Output Data

Model - RI-ENERGYFLOW-3P-SERIES-25-	10KW	15KW	17KW	20KW	25KW
Rated AC Power [W]	10000	15000	17000	20000	25000
Max. output power [VA]	11000	16500	18700	22000	27500
Max. AC Current [A]	16	24	27.1	31.9	40
Rated AC Voltage / Range [V]	3/PE 380, 400, $\pm 20\%$ - 3/N/PE 380, 400, $\pm 20\%$				
Grid frequency / range [Hz]	50 / 60Hz ± 5				
Adjustable Power Factor [cos Φ]	0.8 leading ~ 0.8 lagging				
Output THDi (@Rated Output)	<3%				

Efficiency

Model - RI-ENERGYFLOW-3P-SERIES-25-	10KW	15KW	17KW	20KW	25KW
Max. Efficiency	98.30%		98.40%	98.50%	
Euro Efficiency	98.00%		98.10%	98.20%	
MPPT Efficiency	99.90%				

General Specifications

Model - RI-ENERGYFLOW-3P-SERIES-25-	10KW	15KW	17KW	20KW	25KW
Size (Width*Height*Depth) [mm]	506 x 386 x 185				
Weight [KG]	23				
User Interface	LCD				
Communication	RS485 (Standard), WIFI or GPRS				
Ambient Temperature Range	-25...60°C				
Relative Humidity	0 - 100%				
Operating Altitude [m]	≤ 4000				
Standby Self Consumption [W]	< 0.2				
Topology	Transformerless				
Cooling	Natural convection		Fan		
Protection Grades	IP65				
Noise [dB]	< 30		< 45		
Warranty [years]	5 years (Optional 7 or 10 years)				
Protection	DC Insulation Monitoring DC Isolator Switch Input Reverse Polarity Protection Anti-island Protection Residual Current Monitoring Over-heat Protection AC Overcurrent Protection AC Short-circuit Protection AC Overvoltage Protection DC Surge Protection AC Surge Protection				

Certification & Standards

Grid Regulation	IEC61727, IEC62116, IEC60068, IEC61683
Safety Regulation	IEC 62109-1, IEC 62109-2
EMC	EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12, IEC61000-4-16, IEC61000-4-18, IEC61000-4-29

Dimensions (mm)

Model Selection Table

Description	Model
10kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-25-10KW
15kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-25-15KW
17kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-25-17KW
20kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-25-20KW
25kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-25-25KW