

RI-ENERGYFLOW-3P-SERIES-15

3 Phase On-Grid Inverters



- Available as 4kW, 5kW, 6kW, 8kW, 10kW, 12kW and 15kW
- Three Phase, 2 MPPT versions
- Remote monitoring
- Natural cooling quiet operation
- Compact Size
- 50% DC input oversizing
- Wide MPPT range (160...950V)
- IP65 Rated
- Easy installation
- Built-in zero export function
- G98, G99 and G100 compliant

Product Description

The RI-ENERGYFLOW-3P-SERIES-15 range forms part of an expanding family of inverters from Rayleigh Instruments.

These inverters are ideal for residential and commercial projects.

The range applies advanced topology and innovative control technology to achieve a maximum efficiency of 98.3% and maximum long-term returns and profitability for project owners.

DC Input Data

Model - RI-ENERGYFLOW-3P-SERIES-15-	4KW	5KW	6KW	8KW	10KW	12KW	15KW
Max. Recommended PV Power [Wp]	6000	7500	9000	12000	15000	18000	22500
Max. DC Input Voltage [V]	1000						
MPPT voltage Range [V]	160...950			250...950			
Rated Input Voltage [V]	630						
Start-up Voltage [V]	160			200			
No. of MPP Trackers	2						
No. of Input Strings per Tracker	1/1						2/1
Max. DC Input Current [A]	12.5 / 12.5						20 / 12.5
DC Switch	Integrated						

AC Output Data

Model - RI-ENERGYFLOW-3P-SERIES-15-	4KW	5KW	6KW	8KW	10KW	12KW	15KW
Rated AC Power [W]	4000	5000	6000	8000	10000	12000	15000
Max. output power [VA]	4400	5500	6600	8800	11000	13200	16500
Max. AC Current [A]	6.4	8	9.6	12.8	16.0	19.2	24.0
Rated AC Voltage / Range [V]	3/PE 380, 400, ±20% - 3/N/PE 380, 400, ±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-15-	4KW	5KW	6KW	8KW	10KW	12KW	15KW
Max. Efficiency	98.30%						
Euro Efficiency	97.60%				97.80%		
MPPT Efficiency	99.90%						

General Specifications

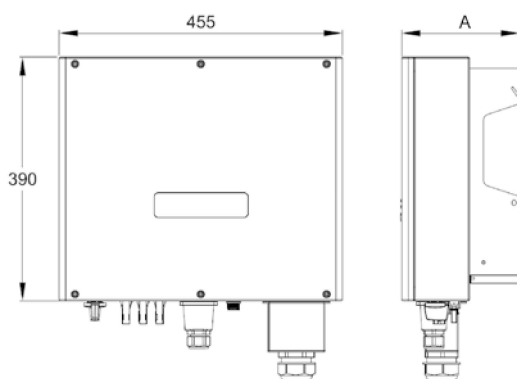
Model - RI-ENERGYFLOW-3P-SERIES-15-	4KW	5KW	6KW	8KW	10KW	12KW	15KW
Size (Width*Height*Depth) [mm]	455 x 390 x 160			455 x 390 x 175			455 x 390 x 190
Weight [KG]	16.3			18.3			21.6
User Interface	LCD						
Communication	RS485 (Standard), WIFI or GPRS						
Ambient Temperature Range	-25...60°C						
Relative Humidity	0 - 100%						
Operating Altitude [m]	≤ 4000						
Standby Self Consumption [W]	< 0.2						
Topology	Transformerless						
Cooling	Natural convection						
Protection Grades	IP65						

Noise [dB]	< 30
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	C10/11, PEA, MEA, G98, G99, EN50549, CEI0-21, CEI0-16, 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)



Dimensions for depth A

4K, 5K, 6K - A = 160mm

8K, 10K, 12K - A = 175mm

15K - A = 190mm

Model Selection Table

Description	Model
4kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-15-4KW
5kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-15-5KW
6kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-15-6KW
8kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-15-8KW
10kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-15-10KW
12kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-15-12KW
15kW AC Output Inverter	RI-ENERGYFLOW-3P-SERIES-15-15KW