

## 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 and G99 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]              | 140...950  |      |      |       |       |       |         |
| Rated Input Voltage [V]             | 630        |      |      |       |       |       |         |
| Start-up Voltage [V]                | 160        |      |      |       |       |       |         |
| No. of MPP Trackers                 | 2          |      |      |       |       |       |         |
| No. of Input Strings per Tracker    | 1/1        |      |      |       |       |       | 2/1     |
| Max. DC Input Current [A]           | 16 / 16    |      |      |       |       |       | 20 / 16 |
| 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                     | 98.40% |     |     | 98.50% |      |      |      |
| Euro Efficiency                     | 97.87% |     |     | 98.00% |      |      |      |

## General Specifications

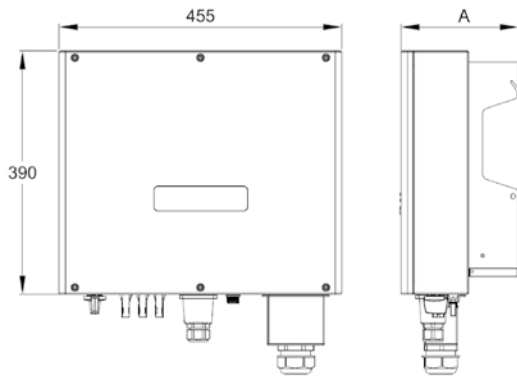
| Model - RI-ENERGYFLOW-3P-SERIES-15- | 4KW                            | 5KW | 6KW | 8KW             | 10KW | 12KW | 15KW            |
|-------------------------------------|--------------------------------|-----|-----|-----------------|------|------|-----------------|
| Size (Width*Height*Depth) [mm]      | 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 (conditions apply) | 10 years  |
| Protection                  | DC Insulation Monitoring<br>DC Isolator Switch<br>Input Reverse Polarity Protection<br>Anti-island Protection<br>Residual Current Monitoring<br>Over-heat Protection<br>AC Overcurrent Protection<br>AC Short-circuit Protection<br>AC Overvoltage Protection<br>DC Surge Protection<br>AC Surge Protection |

### Certification & Standards

|                   |   |
|-------------------|---|
| Grid Regulation   | C10/11, PEA, MEA, EN50549, CEI0-21, CEI0-16, IEC61727, IEC62116, IEC60068, IEC61683, G98, G99                                     |
| 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 |