

RI-ENERGYFLOW-MINI



On-Grid Inverters

- Available as 1.1kW, 1.6kW, 2.2kW, 2.7kW, 3.3kW and 3.68kW - Single Phase, 1 MPPT versions
- Natural cooling mute operation
- Remote monitoring
- Compact Size
- IP65 Rated
- Easy installation
- Optional built-in Zero Export function
- G98, G99 and G100 compliant

Product Description

The RI-ENERGYFLOW-MINI Series forms part of an expanding family of inverters from Rayleigh Instruments.

These compact inverters are an ideal choice for residential projects with higher power density. Wider input voltage ranges offer more flexible installation and are a perfect match for high power PV panels.

DC Input Data

Model - RI-ENERGYFLOW-MINI-DUAL-	1.1	1.6	2.2	2.7	3.3	3.68
Max. Recommended PV Power [Wp]	1400	2400	2800	3500	4200	4800
Rated Input Voltage [V]	360					
Max. DC Input Voltage [V]	500	500	500	550	550	550
MPPT voltage Range [V]	50...500	50...500	50...500	50...550	50...550	50...550
Start-up Voltage [V]	70					
No. of MPP Trackers	1					
No. of Input Strings per Tracker	1					
Max. DC Input Current [A]	13.5					
DC Switch	Optional					

AC Output Data

Model - RI-ENERGYFLOW-MINI-DUAL-	1.1	1.6	2.2	2.7	3.3	3.68
Rated AC Power [W]	1100	1600	2200	2700	3300	3680
Max. output power [VA]	1100	1600	2200	2700	3300	3680
Max. AC Current [A]	4.8	7.2	9.6	12	14.4	16
Rated AC Voltage / Range [V]	220 / 230; 160 - 290					
Grid frequency / range [Hz]	50 / 60Hz ±5					
Adjustable Power Factor [cos Φ]	0.8 leading ~ 0.8 lagging					
Output THDi (@Rated Output)	≤2%					

Efficiency

Model - RI-ENERGYFLOW-MINI-DUAL-	1.1	1.6	2.2	2.7	3.3	3.68
Max. Efficiency	97.00%	97.10%	97.10%	97.30%	97.30%	97.30%
Euro Efficiency	96.50%	96.60%	96.60%	96.80%	96.80%	96.80%
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%

General Specifications

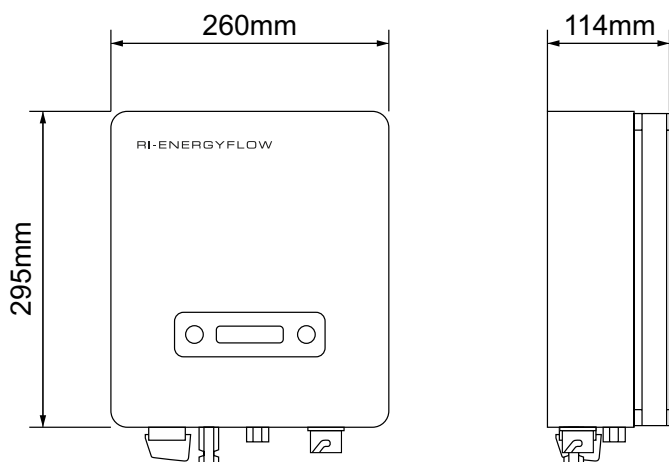
Model - RI-ENERGYFLOW-MINI-DUAL-	1.1	1.6	2.2	2.7	3.3	3.68
Size (Width*Height*Depth) [mm]	295 x 260 x 115					335 x 260 x 120
Weight [KG]	6.8					7.5
User Interface	LCD					
Communication	RS485 or WIFI or GPRS					
Ambient Temperature Range	-25...60°C					
Relative Humidity	0 - 100%					
Operating Altitude [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	VDE 0126-1-1, G98, EN50549, C10 / 11, PEA, MEA, AS4777, CEI0-21, IEC61727, IEC62116, IEC60068, IEC61683
Safety Regulation	IEC 62109-1, IEC 62109-2
EMC	EN 61000-3-2, EN 61000-3-3, EN61000-6-1, EN61000-6-3, IEC61000-4-16, IEC61000-4-18, IEC61000-4-29

Dimensions (mm)



Model Selection Table

Description	Model
1100W AC Output Inverter	RI-ENERGYFLOW-MINI-1.1
1600W AC Output Inverter	RI-ENERGYFLOW-MINI-1.6
2200W AC Output Inverter	RI-ENERGYFLOW-MINI-2.2
2700W AC Output Inverter	RI-ENERGYFLOW-MINI-2.7
3300W AC Output Inverter	RI-ENERGYFLOW-MINI-3.3
3680W AC Output Inverter	RI-ENERGYFLOW-MINI-3.68