

Frequently Asked Questions





RI-ENERGYFLOW

Modular Inverters & Battery Solution for Solar and Energy Storage - Your questions answered

Do I need a separate inverter?

No, this has a built-in Hybrid Inverter.

Will this work if I have an inverter already installed?

Yes, you can use this as an AC-coupled battery pack not unlike a Tesla Powerwall. Don't connect the PV strings and select 'AC-Coupled' in the menu. Ideally this solution is best used as a replacement of existing inverter or as a new PV install.

How many batteries can be connected?

Single Phase - 4no (20kWh) with an Inverter: multiple of 5, 10, 15 & 20kWh

3 Phase - 8no (40kWh) with one Inverter (multiple inverters can be used) multiple of 10, 20, 30, 40kWh

Is the battery pack the same for both Single Phase and 3-Phase?

Yes.

Do I need G99 approval?

Only on the 5kW, 6kW inverters. 3 Phase inverter is less than 16a per phase.

What is the manufacturer's warranty period?

10 years /10,000 cycles for the battery*

5 years for the inverter* can be upgraded to 10 years. Contact us for more information.

*Depends on ambient temperature and usage

How many strings can be connected?

SP, 2 strings with 2 MPPT, 1 string per MPPT.

3P, 2 Strings with 2 MPPT, 1 string per MPPT.

Does the Inverter come with monitoring?

A "SOLARMAN" Wi-Fi dongle is included. The dongle requires the "SOLARMAN SMART" app on your phone for setup.

Search App Store/Google Play for "SOLARMAN SMART".

Otherwise **rayleighconnect**[™] can be used with the Systems for an additional cost.

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Can this be installed outside?

Yes. The casing is IP65 but, we would recommend a shelter over the unit to protect from snow etc. (Be sure to leave clearance of at least 300mm, to prevent birds nesting.)

Mounting Feet are available (approx. 300mm high)

Does this have back up in case of power outage?

Yes. It has a dedicated back up output.		
SP: 3.68kW = 16A	5kW/6kW = 20A	
3P: 10kW = 14.5A	12kW = 17.4A	

What is the maximum DC current and kWp from the Modules?

3.68kW	15A per tracker	4.8kWp
5kW	15A per tracker	6.5kWp
6kW	15A per tracker	7.5kWp
10kW 3P	15A per tracker	20kWp

Can this charge from the grid?

Yes, menu has a function to charge from the grid.

Self-consumption - Charge from GRID - enable/disable.

Where do I put the CT?

This needs to be installed near to the DNO meter as possible. With the arrow pointing towards to the grid supply.

Can I use a Modbus Meter instead of CT?

Yes. Please use the RI-D18-CT 16mm meter and cable back to the inverter using RS485 Shielded twisted pair. Inverter needs configuring in the menu to "Meter" then "Rayleigh". Menu Path: Setup > System settings > CT/METER > METER > Rayleigh.

3PH inverter requires a RI-MOD 3P M Metering kit. This consists of a DIN rail meter and 3no Current Transformers.

What is the inverters default setting?

Self-consume (this setting is used for charging the battery when excess energy is being generated from the Solar PV) this will significantly reduce export to the grid.

Does it have surge protection?

Yes. AC and DC SP built in.

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Does the battery have Heat Tape?

Yes, included. Setting is 'Automatic'.

Do I need extra cables?

The Hybrid inverter comes with one set of cables for one battery. Additional batteries require extra cable kits. These are supplied separately in packs (2 battery kit, 3 battery kit etc.)

3PH inverters will be multiples of 10kWh (10.20,30,40kWh) kits. These are different to the SP kits.

Can I install more than one Inverter?

Single Phase:-No CANNOT BE USED IN PARALLEL.

Three Phase:-

Yes, multiple inverters and batteries can be installed on same supply. An inverter is made 'MASTER' up to 3no additional inverters can be added as 'SLAVES'

What is the Weight of the Battery?

54kg

Can I set Charge/Discharge for OFF-PEAK tariffs?

Yes, through changing the inverters working mode to "Peak Shift" you can set desired charge and discharge times.

e.g. 00:00 to 05:00 Charge.

18:00 to 12:00 Discharge.

Where can these systems be installed?

Under our specifications the only location these cannot be installed inside a property is the Loft.

Our manuals are fully available for download from our website, please see said manuals for further information on our specifications and restrictions.

With one of these systems, will I ever have to pay for electricity?

Yes, everyone must pay for at least their standing charge.

There will also be times when the load is too high for the PV and battery to fully accommodate, as such the GRID will have to assist with supplying to the consumption.

*Unless you are running completely OFF-GRID.