

**What is an inverter?** A grid-connected inverter is the electronic device which converts DC power, generated by your solar modules, to AC power at the same frequency and voltage used in your household. Most inverters have a MPPT (Maximum Power point tracker) and are between 90-98% efficient when designed well.

**What features does my inverter have?** Most inverters will have a display on them which will generally tell you things like system voltage, current, power, daily power and total power output. Some inverters (Aurora) have data-loggers which allow you to store system performance details and some others allow you to connect to your inverter for information (e.g SMA), however your computer must be on for the latter.

**Should I buy a larger inverter, to expand later with?** This may be a cost-effective option as it is cheaper to buy a larger inverter than two smaller inverters. However, the expanded system must have the same input as the original system if your inverter has only one MPPT so if you're thinking of expanding in five years time it may be a good idea to buy a separate system as panel sizes or electrical characteristics may have changed. Otherwise you can buy an inverter with 2xMPPT inputs and leave the second one free.

**What is a Maximum Power Point tracker?** A MPPT is a sophisticated piece of electronic equipment within an inverter that changes the system voltage to maximize the power harnessed from your system.

**What are the limitations of an MPPT?** The MPPT will only work within a specific voltage range so the solar system should be designed not to go outside of this range. Also the input should be as uniform as possible – which means that you should use solar panels with homogenous output and the same orientation and pitch.

**What if I want to use different orientations due to limited roof space or expand with different modules some time in the future?** each MPPT input should have a uniform input so in these cases you either need to put a separate inverter on a different phase or buy an inverter with 2 x MPPT inputs such as the Aurora. These essentially have two 'brains'.

**Can I put a wind turbine on my solar inverter?** There are inverters that can be used for both wind and solar, however it is much more efficient to have separate inverters as they operate very differently.

**Where does my inverter go?** Generally, we'd like inverters to go close to the switchboard or between the solar array (panels) and switchboard. Some inverters are weatherproof so can be put out on an outdoor wall, whereas some inverters are not and so should be put in a garage or under cover out of the elements. It can not be put in the roof-space.

**Does my inverter make noise?** This depends on the inverter, some are fan-forced while some are convection cooling. They can generally produce from 5-50db at 1m, 40db is roughly equivalent to the back of a fridge.

**What does my inverter look like? How big is it?** This depends on the type of inverter as they come in all different shapes, sizes and varying levels of beauty. They are generally smaller than an over-night bag and fit on your wall at about eye level. Ask your assessor for photos of it.

For more information check the [inverters page](#) under products on our website or please call Renewablelogic on 1300 39 10 77 or email your enquiries to [info@renewablelogic.com.au](mailto:info@renewablelogic.com.au).