

A-si Myths, the Truth...

Myth 4: A-si panels produce too much power and damage inverters???

This is a silly one. Complaining about getting TOO MUCH power???

But; some Inverter manufacturers specify only a power output rating for Crystalline panels, so the A-si panels give 160% more power and would obviously need a 160% bigger Inverter.

Example FroniusIG30 for a 3.6 Kilowatts peak, PV system, is rated at a Maximum of only 2.65 Kilowatts, output power. Now we know Crystalline panels would never be able to give any more than 2.65Kw BUT obviously, a 3.6Kwp A-si array, will easily produce 4.8Kw, which may damage such a small inverter over many months. The answer is easy - use a 5Kw output, Inverter.

There are many A-si installations with Inverters that are much too small for A-si PV. This leads to wrong measurements of output power from A-si installations. The example above would measure the MAXIMUM output as 2.65Kw all day long, when in fact the A-si system was producing 4.8Kw all day long and running the Inverter to its maximum power output of 2.65 Kw only, wasting a lot of energy that should have been used.

There is another problem for those ignorant of A-si technology. This is the extra 30% Bonus power, produced during the first 3 or 4 weeks of the A-si output. Most inverters, including the FroniusIG30, will handle the EXTRA power, by cutting back the input power, with the MPPT system. This will keep the inverter safe over the few weeks until the 30% bonus power has stopped. Then the next twenty years, the Inverter will run at optimum output and will last a long time. An alternative for inverters which can not handle the extra 30% power, is to disconnect 30% of the Solar panels for 4 weeks, until the 'Staebler-Wronsky Effect' has completed. Then reconnect the panels to get the full output for the next 25 years.