



PV Plus OVIC, Ocean Village, 4 Ocean Way, Southampton, Hampshire, SO14 3JZ
T: 02380 230893 E: info@pv-plus.co.uk

Maintenance of Photovoltaic Installation

PV Plus offer Solar Maintenance services. If you would like us to undertake the maintenance please contact us to arrange. Details are on the website.

As with any piece of equipment, performing regular maintenance and inspection of components will help ensure system performance and minimise disruption due to component failure. If our described procedures differ from those suggested by your manufacturer follow the procedures outlined in the system user manual supplied with your system.

General Maintenance

Annual Testing should include the following and be conducted by accredited Solar PV Installers. You should be given a test report which should be kept safe with the Logbook.

- Check the fixings on the solar modules
- Clean fans in Inverter
- Check the D/C cabling to make sure theres no obvious damage
- Check all isolation switches are functioning as they should
- Test the strings on the system to make sure that the panels are operating correctly.

As well as the above checks please see below maintenance guidelines.

Logbook

As part of the regular maintenance of a system, it is recommended that you keep a logbook recording all system maintenance and performance. In the logbook the type and frequency of maintenance and who performed it should be recorded. If kept up to date, it can be used to provide a history of the system which can then be used for fault diagnosis. Every month the meter reading should be recorded, this would be found on the meter which is located in the plant room, labelled PV GEN METER.

Check Current Performance

A sign of the system not working correctly would be to check the Siebert Display screen located in the office. If Current Performance shows as 0 during daylight hours this would suggest a problem with the system. PV Plus should be contacted as soon as possible.

PV Panel Maintenance

In case of heavy soiling, it is recommended to clean the modules with plenty of water (tap water or deionized water) without any cleaning agents. If necessary, a soft cleaning device (sponge.g. soft brush with split bristles) maybe be used. In case of soiling by dust or sand the modules can be cleaned with a soft brush without using

There are two ways you can check to see if your panels need to be cleaned:

1. **Physical Inspection**: Inspect the solar panels on a periodic basis (frequency depends on location on location of panels). Generally, speaking dusty areas typically require more frequent inspection. If the panels are dirty this will effect their performance.
2. **Use a Monitoring Service**: Another way to make sure you're getting the most solar potential out of your PV system is through a monitoring systems and service. For a annual fee or upfront cost you can monitor how your system is performing. Your system is expected to produce a certain amount of power during each month. A solar monitoring system can tell you if your system is off line or if it's not performing as expected and run diagnostic programs. Depending on the monitoring systems, you can access your information from the web, from a wall mounted-device, or even from your iPhone or other mobile device. Monitoring systems are usually an extra expense, while not essential, they do make troubleshooting and system performance easier to see.

SolarWorld recommend regular inspections of the system to ensure that:

1. All fixtures are securely tightened and corrosion-free;
2. Wiring is securely connected, properly arranged and free of corrosion;
3. Cables are free of damage;

PV Inverter Maintenance

The only maintenance required generally is to ensure the inverter is able to cool its self, so it's mainly the vents and the fan which will need to be checked, depending on the location, this could be months or years apart, however based on its location in the plant room we recommend a check annually.

There are no specific requirements with regards to the warranty, as an example, if the vents were to be blocked by dust/insects etc. If the inverter is unable to cool its self-down, it will de-rate its self, ultimately, it will switch off when it is too hot and unable to cool down, other than it not working efficiently, it won't affect the warranty, it will then return to normal once the vents have been cleared.

