

Solar PV Commissioning Record

A solar PV commissioning record: panels, inverter, string tests (Voc, Isc, insulation resistance, polarity), isolators and labels, the G98 or G99 route, MCS certificate, generation meter and handover.

1. System

Project

Client

Site *

Site address

Array position (GPS)

Mark current location by the array or at the inverter, so the record and the next visit find the system.

Date commissioned *

Time

Installer and MCS certification number *

Electrical competence (for example competent person scheme)

Panel make and model *

Number of panels

Panel rating (Wp)

Array size (kWp) (if applicable; worked out automatically in the app)

Inverter make and model *

Scan the inverter label

Scanned in the SiteSurvey app. On paper, write the numbers: serial number, model number.

Inverter AC rating (kW)

Supply (choose one)

☐ Single-phase ☐ Three-phase

Is a battery installed with it?

☐ Yes ☐ No

Weather capture

Digital form: use Record current conditions. On paper, record date/time, temperature (°C), wind (mph and direction), conditions and source. Keep observed conditions separate from forecast estimates.

2. String tests

Voc tolerance you are working to (±%)

From your commissioning procedure. The form compares each string's Voc with the expected value within this tolerance.

Minimum insulation resistance you are working to (MΩ)

From your test procedure, for the system voltage and test voltage used.

Strings tested (copy this block for each one)

String reference *

Panels in the string

Open-circuit voltage Voc (V)

Expected Voc for this string (V)

From the design: the module Voc times the panels in the string, corrected for the cell temperature at the time of the test.

Difference from expected (%) (if applicable; worked out automatically in the app)

Voc against the tolerance (if applicable; worked out automatically in the app)

Short-circuit current Isc (A)

Insulation resistance (MΩ)

Insulation resistance against the minimum (if applicable; worked out automatically in the app)

Polarity (choose one)

☐ Correct ☐ Fault

Result * (choose one)

☐ Pass ☐ Fail

Notes (if applicable)

Strings tested (worked out automatically in the app)

Panels in the strings (worked out automatically in the app)

Against the number of panels (if applicable; worked out automatically in the app)

Strings with Voc outside the tolerance (worked out automatically in the app)

Strings below the insulation minimum (worked out automatically in the app)

Polarity faults (worked out automatically in the app)

Strings marked as failed (worked out automatically in the app)

If applicable: A string is outside the Voc tolerance, below the insulation minimum or has a polarity fault. Find the cause and retest before the system is energised and handed over.

String tests follow BS EN 62446-1 (grid-connected PV: documentation, commissioning tests and inspection): continuity of protective conductors, polarity, open-circuit voltage (Voc), short-circuit current (Isc) and insulation resistance of each string. The installation itself must meet BS 7671 Section 712 (solar photovoltaic power supply systems). Compare each reading against the expected value from the design and the manufacturer data, not a general figure.

DC and AC isolators fitted and labelled?

☐ Yes ☐ No

Warning labels fitted at the meter, consumer unit and inverter?

☐ Yes ☐ No

Generation meter reading at commissioning

Monitoring app set up for the customer?

☐ Yes ☐ No

3. DNO and MCS

Connection route (choose one)

☐ G98: notify after commissioning ☐ G99: approved before installation

MCS guidance: where G98 applies and the system is under 16 A per phase, notify the DNO within 28 days of commissioning (G98 Form B). Where G99 applies, above 16 A per phase, permission to connect is needed before installation.

If applicable: Over 3.68 kW with a battery. MCS says the application (Form A1-1, or Form A1-2 for a fully type-tested integrated system) must go to the DNO before installation.

Date the DNO was notified or approved

Days from commissioning to notification (if applicable; worked out automatically in the app)

If applicable: More than 28 days after commissioning.

If applicable: The approval date is after the commissioning date. G99 approval is needed before installation.

MCS certificate number

Date the MCS certificate was created

MCS sets a deadline for creating the MCS certificate after the commissioning date, and the period has changed over time. Check the current MCS installer scheme documents (MCS 001 and MIS 3002) or the MCS Installation Database for the deadline that applies to this job.

If applicable: More than 14 days after commissioning. Check this against the current MCS deadline.

MCS: to be paid under the Smart Export Guarantee, the installation must be MCS certified and have a smart meter that records exported electricity.

4. Handover

This is a site commissioning record. It supports the MCS certificate and the Electrical Installation Certificate, but it is not either certificate. Issue those separately.

Are there defects or actions to record?

☐ Yes ☐ No

Defects and actions (copy this block for each one; if applicable)

Defect or action *

Priority (choose one)

☐ Urgent ☐ High ☐ Medium ☐ Low

Owner

Due

Status (choose one)☐ Open ☐ In progress ☐ Completed**Photos** (photos: attach, or note the file names)

Actions still open (if applicable; worked out automatically in the app)

Urgent actions (if applicable; worked out automatically in the app)

Photos of the array, inverter, isolators and labels (photos: attach, or note the file names)

Handed over (tick all that apply)

- ☐ MCS certificate
- ☐ Electrical installation certificate
- ☐ Manuals and warranties
- ☐ Generation estimate
- ☐ How to isolate the system

Customer name

Customer signature**Installer name ***

Installer signature**Recommended next inspection due**

Set by the installer from the O&M manual and the electrical certificate.

Days to the next inspection (if applicable; worked out automatically in the app)

If applicable: The next due date is before the date of this visit. Check the date.