

Solar PV commissioning sheet template

A commissioning test sheet for each PV string and its inverter: visual inspection, Voc, Isc, polarity, insulation resistance, isolator and inverter checks, and a signed result.

Project	Site	Completed by	Date
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1. Test details

1.1 Installation address **Required**

 TEXT

1.2 Verification type **Required**

☐ Initial verification
 ☐ Periodic verification

CHOOSE ONE

1.3 Test date **Required**

 DATE

1.4 Tested by **Required**

 TEXT

1.5 Test instruments and serial numbers **Required**

Include the calibration due date.

 TEXT

2. Inverter and string

One sheet per string. Scan or type the serials so they sit against the product record.

2.1 Inverter make and model **Required**

 TEXT

2.2 Inverter serial number **Required**

 TEXT

2.3 String reference **Required**

e.g. INV2 / MPPT1 / S3, matching the string on the layout drawing.

 TEXT

2.4 Modules in string **Required**

 READING

2.5 Rated Voc of string (STC) **Required** (V)

From the design: module Voc × modules in string.

READING

2.6 Rated Isc of string (STC) **Required** (A)

READING

2.7 String protective device rating (A)

Where string fuses or breakers are fitted.

READING

2.8 String cable size (mm²)

READING

3. Visual inspection

3.1 Inspection **Required**

CHECKLIST GRID

Check	Pass	Fail	N/A
Modules undamaged and fixed to the design	☐	☐	☐
DC connectors matched, crimped with the correct tool, clear of standing water	☐	☐	☐
DC cables supported and protected	☐	☐	☐
Enclosures keep their IP rating (bottom entry, one cable per gland)	☐	☐	☐
DC isolator accessible and labelled	☐	☐	☐
Warning labels and schematic displayed	☐	☐	☐
Inverter ventilation clear	☐	☐	☐

4. String tests

4.1 Polarity correct **Required**

PASS / FAIL

Check before closing the isolator or connecting the inverter.

☐ Pass ☐ Fail

4.2 Measured Voc **Required** (V)

READING

4.3 Measured Isc **Required** (A)

READING

4.4 Irradiance at time of test Required (W/m²)

READING

4.5 Insulation test voltage Required (V)

READING

4.6 Insulation resistance, positive to earth Required (MΩ)

READING

4.7 Insulation resistance, negative to earth Required (MΩ)

READING

4.8 Earth continuity (where array frame earthing is fitted) (Ω)

READING

5. Isolator and inverter

5.1 Array isolator location Required

TEXT

5.2 Array isolator rating Required (A)

READING

5.3 Array isolator functional check Required

PASS / FAIL

☐ Pass ☐ Fail

5.4 Arc fault detection enabled (if the inverter has it)

CHOOSE ONE

☐ Enabled ☐ Not available on this inverter

5.5 Grid settings / export limit match the DNO connection Required

YES / NO

Record the export limit in the notes if one applies.

☐ Yes ☐ No

5.6 Inverter functional check Required

PASS / FAIL

Running, exporting, no fault codes.

☐ Pass ☐ Fail

6. Result and sign-off

6.1 Overall result Required

PASS / FAIL

☐ Pass ☐ Fail

6.2 What failed and the action taken Required

↳ Shown when Overall result is Fail

NOTES

6.3 Photo of the fault

↳ Shown when Overall result is Fail

PHOTO

6.4 Notes

NOTES

6.5 Tested by (signature) Required

SIGNATURE