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A PV array consisting of 18 panels rated at 4.6A per panel installed as three strings of six panels connected in parallel will provide a total current output of?

<https://selldocx.com/products>

</test-bank-a-practical-guide-to-renewable-energy-1e-installation>

(A) 13.8A

(B) 82.8A

(C) 4.6A

(D) 13.08A

**Answer:**

(A)13.8A

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SSEG is the abbreviation for?

(A) Smart scale electrical generator

(B) Short circuit electrical generation

(C) Small scale embedded generator

(D) Small scale electrical generation

**Answer:**

(C) Small scale embedded generator

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The amount of energy produced by a PV array is measured by using a?

(A) Voltage indicator

(B) Import meter

(C) Multi meter

(D) Generation meter

**Answer:**

(D) Generation meter

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It is a requirement if the electrical supply to an installation is turned off that the inverter shuts down, this is to prevent?

(A) Overloading

(B) Islanding

(C) Short circuit

(D) Wear and tear

**Answer:**

(B)Islanding

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**Voc is the abbreviation for?**

- (A) Open circuit voltage
- (B) Short circuit voltage
- (C) Voltage overload control
- (D) Variable overcurrent collector

**Answer:**

(A) Open circuit voltage

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**For a photovoltaic system the abbreviation for short circuit current is?**

- (A) Pvsc
- (B) Scc
- (C) Isc
- (D) Ipf

**Answer:**

(C) Isc

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**How many pv strings can be connected in series before the installation of string fuses would be required?**

- (A) Two
- (B) Three
- (C) Four
- (D) Five

**Answer:**

(B) Three

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**Six panels with an Isc for each panel of 3.9A are connected in series. The measured irradiance is 680w, calculate the expected measured Isc**

- (A) 2.65W
- (B) 26.8A
- (C) 23.4A

**Answer:**

(D) 2.68A

(D 2.68A  
)

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**What would be the particular feature required for an isolator to be used to isolate the photovoltaic panels from the inverter**

- (A) DC rated
- (B) Must be lockable
- (C) AC rated
- (D Red

**Answer:**

(A DC rated  
)

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**An isolator used to isolate the inverter from the AC supply must be capable of being?**

- (A) Locked
- (B) Adjusted
- (C) Fused
- (D overloaded

**Answer:**

(A)Locked

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**The most suitable device for measuring the DC current in a photovoltaic system is a?**

- (A) Voltage indicator
- (B) Insulation resistance tester
- (C) DC clamp meter
- (D Multifunctional test instrument

**Answer:**

(C DC clamp meter  
)

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**On completion of the installation of a pv system it is a requirement that documentation is completed for both the AC and the DC side of the installation. What documentation will be required for the AC installation?**

- (A) An electrical installation certificate, a schedule of test results and a schedule of inspection.

**Answer:**

(A An electrical installation certificate, a schedule of test results and a schedule of inspection.

- (B) A Minor works certificate
- (C) An electrical installation certificate only
- (D) An electrical installation report, a schedule of test results and a schedule of inspections

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**Name two types of solar thermal collectors.**

- (A) Evacuated tube and flat plate collector
- (B) Flat plate and hot plate collectors
- (C) Evacuated tube and filled tube collectors
- (D) Evacuated tube and flat plate collector

**Answer:**

(D) Evacuated tube and flat plate collector

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**The installation of pv or solar thermal systems will not normally require planning permission unless?**

- (A) They are on the front of a building
- (B) The building is in a conservation area, a listed building or it is on a heritage site.
- (C) They are installed in the back garden
- (D) They are installed by an MCS registered installer

**Answer:**

(B) The building is in a conservation area, a listed building or it is on a heritage site.

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**An active solar thermal system will be one which has a?**

- (A) Flat plate collector
- (B) Large storage cylinder
- (C) Pump
- (D) Evacuated tube collector

**Answer:**

(C) Pump

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**Protection from the freezing of a sealed solar thermal system is**

**achieved by using?**

- (A) Lagging
- (B) Frost stat
- (C) A mixture of glycol and water
- (D) Anti freeze spray

**Answer:**

(C) A mixture of glycol and water

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**The ratio of glycol to water can be measured by using a?**

- (A) Refractometer
- (B) Thermometer
- (C) Glycometor
- (D) Anemometer

**Answer:**

(A) Refractometer

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**The piece of equipment used to control a solar thermal system is known as a ?**

- (A) Digital temperature controller
- (B) Differential temperature controller
- (C) Differential temperature contraption
- (D) Direct temperature control

**Answer:**

(B) Differential temperature controller

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**Which disease is it essential to eliminate within a solar thermal system.**

- (A) Legionnaires disease
- (B) Athletes foot
- (C) Legandhair disease
- (D) Weils disease

**Answer:**

(A) Legionnaires disease

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**Where a twin coil cylinder is used to store hot water, which coil should be connected to the solar panel?**

(A) Either

(B) Both

(C) The top one

(D) The lowest one

**Answer:**

(D) The lowest one

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**The solar thermal system which has no water in the collector when the system is at rest is known as a?**

(A) Empty system

(B) Drain back system

(C) Active system

(D) Passive system

**Answer:**

(B) Drain back system

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**In a sealed system what is the name of the piece of equipment which is used to deal with the additional pressure produced when the collector fluid heats up**

(A) Heat protection vessel

(B) Overflow vessel

(C) An expansion vessel

(D) Pressure gauge

**Answer:**

(C) An expansion vessel