Microinverter Racking Test.

1. What is the definition of an inverter?

An electronic device that converts DC into AC

1. Draw the symbol for an inverter.
	1. 
2. Why use a microinverter?
	1. No DC wiring.
	2. AC wiring with standard voltages.
3. What is considered a disadvantage of microinverters?
	1. They can only produce AC power.
	2. They will not operate without a stable AC connection.
4. Why use an inverter?
	1. The DC energy produced by the PV panels is not consumed as DC energy.
	2. The energy is consumed as AC energy
5. What does the microinverter need to produce a standard voltage and frequency?
	1. A battery based system that produces firm power.
	2. A stable AC grid that it can connect to.
6. Describe firm power.

A power source that comes with a guaranteed range of voltage and frequency.

1. Can a microinverter be connected to a micro-grid?

Yes.

1. Name six (6) specifications found on the manufacturers data sheet for a microinverter.
	1. Make and model
	2. Voltage input range
	3. How many cells of the PV panel
	4. Power output
	5. Humidity range
	6. Over current protection
	7. efficiency
	8. Others
2. What two pieces of equipment are recommended as a bonding device?
	1. WEEB
	2. Star washer
3. What are the two acceptable wire sizes for bonding?

AWG #8 and AWG #6

1. What is an installation map?

It is the grid layout of the location of every microinverter complete with the serial number of each microinverter.

1. Explain how to verify that the microinverter is working ( describe two methods).
	1. To visually watch the LEDs for the operation of the microinverter as per manufactures manual.
	2. To measure the irradiance striking the PV panel and calculate the output of the PV panel. Then compare the power being produced by measuring the voltage and current from the microinverter.