

1. Test Name: MPPT Tracking

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MPPT (Maximum power point tracking) is used to track and keep the system to provide the maximum output power at different temperature difference between the cold side and hot side of the TEG (Thermoelectric generator). MPPT should track half of the input voltage.

2. Required Equipment

	Equipment Description	Quantity	Settings / uses
1	Power Supply	1	Supply power to power MPPT and supply vary input voltages
2	Oscilloscope	1	Use to monitor the output voltage of the MPPT
3	MPPT		

Table 1: Required equipment and its settings.

3. Test Procedure

Step 1: Connect the power supply to the MPPT input pins, and oscilloscope to the output pins of the MPPT

Step 2: Slowly increase the input voltages of the MPPT from 0V to 8V

Step 3: Connect oscilloscope to both input and output pins of MPPT circuitry

Step 4: Monitor both input and output voltages of the MPPT and make sure output is half of the input voltages

4. Test Results

Step #	Description	Spec	Measurement
1	Input voltages	0V - 8V	?
2	Output voltages	0V - 4V (half input voltage)	?
3			

Table 2: The results of the test procedure.

Oscilloscope capture when the input voltage is 2V, 4V, 6V and 8V

5. Pass/Fail

Did the unit pass or fail the test? Defend your decision.

PASS	FAIL

Table 3: PASS/FAIL