

1. Test Name: MPPT Converter

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MPPT provides different level of voltages when it's at different battery level, a MPPT converter is used to convert various input voltages to 7.2V with current output of 750mA.

2. Required Equipment

	Equipment Description	Quantity	Settings
1	Power supply	1	4V – 6V various input voltages
2	Multimeter	2	Measure voltage and current at the output pin of the MPPT converter
3	MPPT Converter	1	

Table 1: Required equipment and its settings.

3. Test Procedure

Step 1: Connect the power supply to the input pins of the MPPT converter, and the multimeter in series with the output pins of the MPPT converter

Step 2: Slowly increase the power supply voltage from 0V to 5V

Step 3: Measure the output voltage and current of the Fan converter

4. Test Results

Step #	Description	Spec	Measurement
1	Measure the output voltage and current of the MPPT converter with an input of 4V.	$V_{out}: 7.2V \pm 10\%$ $I_{out}: 750mA \pm 10\%$	0.05V
2	Measure the output voltage and current of the MPPT converter with an input of 5V.	$V_{out}: 7.2V \pm 10\%$ $I_{out}: 750mA \pm 10\%$	7.20 V
3	Measure the output voltage and current of the MPPT converter with an input of 6V.	$V_{out}: 7.2V \pm 10\%$ $I_{out}: 750mA \pm 10\%$	7.22 V

Table 2: The results of the test procedure.

5. Pass/Fail

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

PASS	FAIL
	Fail

Table 3: PASS/FAIL

Did not meet full range of possible TEG voltages