Functional test

**Power test**

1. Connect a resistive load at .
2. Connect the J3 and J4 to the RT-box.
3. Connect the external 12V power supply.
4. Connect a variable DC voltage source at the input of the converter.
5. Start with an input voltage at 0V, and slowly increase the voltage.
6. When a input voltage at 35V has been reached, lower the resistance until the input is at 300W.

**Measurement points**

1. Input and output voltage and current
2. Vds and Vgs of the MOSFETs.
3. Current in the inductor
4. Voltage at both input and output capacitors.

**Input step**

* To simulate sudden change in irradiance or temperature

**Output step**

* To simulate sudden load change.