

Refers to KR series and K78 series.

Phenomenon	Possible Causes	Solutions
The output voltage is lower than rating	<ol style="list-style-type: none"> 1. Overload in the input circuit 2. The input voltage is below the input voltage range 3. Insufficient power of the input power supply, or DCR of battery is too large. 4. The set current limit of input source is too low. 5. No capacitors are connected at the input and output ends, deviating from what the datasheet indicates. 	<ol style="list-style-type: none"> 1. Use a higher output power MORNSUN DC-DC converter module instead. 2. Make sure that the input voltage is within the input voltage range as showing on the datasheet. 3. Use a higher-power input power supply, replace with a battery of lower DCR or increase the battery voltage. 4. Set the current limit knee correctly. 5. Connect sufficient capacitors at the input and output ends according to the datasheet.
The output voltage varies with input voltage.	<ol style="list-style-type: none"> 1. Common ground is not connected well. 2. The input voltage is beyond the input voltage range as datasheet indicates. 	<ol style="list-style-type: none"> 1. Check if loose connection exists. 2. Make sure the input voltage is within the input voltage range indicates on the datasheet or use other MORNSUN models instead.
The module is destroyed when powering.	<ol style="list-style-type: none"> 1. Reverse polarity connection. 2. The input voltage is much higher than the maximal input voltage MORNSUN datasheet indicates. 3. Reversed output capacitor connection 4. Shorted output or extremely over loaded 5. The GND is not connected well (when heavy load) 	<ol style="list-style-type: none"> 1. Check polarity of the input power source and use a live one. 2. Check the available input voltage range and use a live one. 3. Check phase of output capacitor 4. Check output circuits 5. Check if the GND is connected well.
The module fails after a certain period of operation	<ol style="list-style-type: none"> 1. Surge exists in the input power source. 2. Overload exists in the output circuit. 3. No capacitors are connected at the input and output ends, deviating from what the datasheet indicates. 	<ol style="list-style-type: none"> 1. Connect a TVS in parallel at the input end of module. The breakdown voltage should be lower than the maximum indicated on the datasheet. 2. Check the external output circuit. If it consumes power over rating or is short-circuited, use a higher output power MORNSUN DC-DC converter module instead. 3. Connect sufficient capacitors at the input and output ends according to the datasheet.

Note: Please contact our FAE department if above solutions did not solve your problems well.

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