

Phenomenon	Possible Causes	Solutions
The converter does not turn on	<ol style="list-style-type: none"> 1. The converter may have heavily loaded with capacitive load. 2. Not enough input power to drive the load. 3. The converter is overloading. 	<ol style="list-style-type: none"> 1. It is recommended that the capacitive load, which connected to the converter, should be less than the maximum value states on datasheet. 2. Raise the power of input source. 3. Change to use a converter which power is higher, or downsize the output load.
Low output voltage	<ol style="list-style-type: none"> 1. Not enough input power. 2. The converter is overloaded. 3. The line loss between the load and the output terminal is too heavy. 	<ol style="list-style-type: none"> 1. Raise the power of input source. 2. Change to use a converter which power is higher, or downsize the output load. 3. Reduce the line impedance between the load and the output terminal.
No output	<ol style="list-style-type: none"> 1. The output is shorted. 2. The fuse of input end has blown out. 3. Improper input voltage. 	<ol style="list-style-type: none"> 1. Check if output terminals are connected correctly. 2. Check if the spec of the fuse is good. 3. Check if the input voltage is good.
High ripple	The capacitance of external output filtering capacitor is too low.	Refer to datasheet for recommended output filtering capacitor.
The output noise is quite large	<ol style="list-style-type: none"> 1. Oscilloscope is not connected to ground reliably. 2. Oscilloscope bandwidth is selected un conformity. 	<ol style="list-style-type: none"> 1. Check if the oscilloscope is connected to ground well. 2. For regular product the oscilloscope bandwidth is 20MHZ usually when testing the noise.
The converter is easy to damage after a certain period of operation	<ol style="list-style-type: none"> 1. Operation voltage at input end of the converter is too high/too low. 2. The ambient temperature, where the converter operates, is too high. 3. The converter is overloading. 	<ol style="list-style-type: none"> 1. Make sure the input voltage is exactly in operation voltage range of the converter. 2. Operating at high ambient temperature, the converter needs to be de-rated. 3. Change to use a converter which power is higher, or downsize the output load.
For triple output module, the voltage of positive terminal is exact, but the positive/negative terminal behave low output voltage badly.	<ol style="list-style-type: none"> 1. The separate positive terminal loads nothing. 2. The separate positive terminal load too light, the positive negative terminal load too heavy. 	<ol style="list-style-type: none"> 1. Change to use positive/negative converter, or add fake load reasonably separate positive terminal. 2. Add fake load reasonably at the positive terminal, or choose to converter, or choose to use a combinatorial converter who combines a single output ac/dc converter and a positive/ dual output dc/dc converter.
For the positive/negative output converter, low positive output voltage and high negative output voltage.	The positive /negative terminals' loads are unbalance, usually the heavy load terminal behaves low output voltage.	<ol style="list-style-type: none"> 1. Add fake load reasonably at the low output terminal to balance the load correspondingly (do not exceed to twice). 2. Choose to use a combinatorial converter who combines a single positive output ac/dc converter and a positive /negative dual output dc/dc converter, the dc/dc converter afford the balance load and positive/negative output voltage solely.
After a period operation, increased, converter can afford load	The ambient temperature, where the converter operates, is too high.	<ol style="list-style-type: none"> 1. Electrolytic capacitor should not put close to high power heat source. 2. Add radiator, put down the operating ambient temperature of the converter. 3. Please operate according to the power derating

Phenomenon	Possible Causes	Solutions
normally.		Curve strictly when the ambient temperature is too high.
The converter and customer power systems interfere with each other or the module does not meet the customer EMC requirements.	1.The distance between the converter and system sensitive component is too near. 2.Do not connect external EMC circuit according to datasheet.	1. Adjust the distance between the converter and system sensitive component properly and taken shield measure. 2. Connect external EMC circuit according to datasheet recommendation.

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

Tel: 020-38601850 Fax: 020-38601850 E-mail: FAE@mornsun.cn

MORNSUN