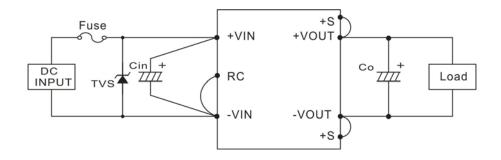
## **APPLICATION NOTE**

#### 1. Remote On/ Off Control Pin

Positive logic remote on/ off turns the module on during a logic high voltage on the remote on/ off pin, and off during a logic voltage low. In order to turn module on or off, the use must supply a switch to control the voltage between the on / off terminal and the –Vin terminal.

### 2. Connection for standard use. (Figure 1.1)

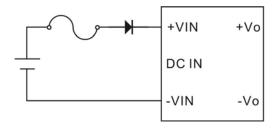


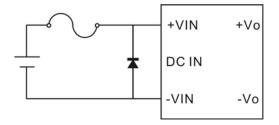
(Figure 1.1)

Cin: External capacitor on the input side

Co: External capacitor on the output side.

# 3. Reverse input voltage protection (Figure 2.1)





(Figure 2.1)

Avoid the reverse input voltage because it will damage the power supply.

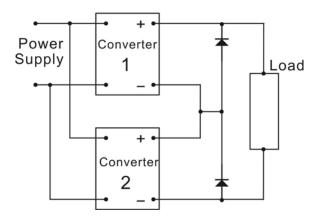
Installing an external diode can protect the converter from the reverse input voltage.

### **APPLICATION NOTE**

### 4. Series and parallel operation

#### I. Series operation

Most power converters can be operated in series if they have overload limitation by either constant current or constant power circuits. To protect each output from the reverse voltage applied by the other unit in the event of load short circuits, reverse biased diodes are used as shown in Figure 3.1.

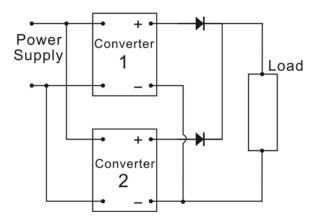


(Figure 3.1)

### II. Parallel operation

This is only recommended with power converters specifically designed for parallel connection. In the parallel redundant scheme illustrated in Figure 3.2 one of the power converters could be replaced by a battery followed by a DC-DC converter to provide a no-break power system in the event of main supply failure.

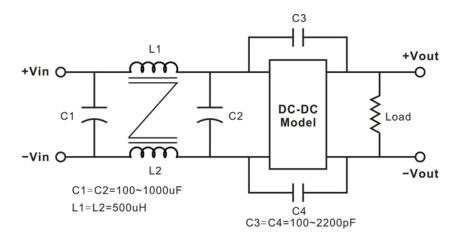
If we want to put the two power supplies in parallel, we have to adjust the output voltage to be the same for both of them. (Hence, if the power supply doesn't support this function of output voltage adjustment, then it shall not be put into parallel)



(Figure 3.2)

### **APPLICATION NOTE**

## 5. EMI Block Diagram (under 40W)



(Figure 4.1)

# 6. Peak-to-Peak Output Noise Measurement Test

Use a Cout ceramic capacitor. Please refer to capacitor value of every series. Scope measurement should be made by using a BNC socket, measurement bandwidth is 0-20 MHz. Position the load between 50 mm and 75 mm from the DC-DC Converter.

