

## **Product Specification**

# XLM 500 Series

**Power Supplies Accessories -**

**Current Sharing Board** 

703598-01 Rev. 08.28.2019



#### **XLM 500: Current Sharing Board**

By using the current sharing boards, the VOUTs (Main Outputs) of two or more XLM500 power supplies may be connected in parallel to provide higher output power. They can also be used in an N+1 configuration to provide greater reliability.

The current sharing board makes use of remote sensing (+RS & -RS) for balancing the output current among power supplies in parallel operation. Each of the paralleled power supplies can deliver and compensate up to 0.2V of output voltage differences. If the voltage drop (wire loss) is more than 0.2V because of long cable connections, the equal sharing of output current may not work.

Only the main output is capable of current sharing. It is recommended that the total load does not exceed 90% of the sum of the rated outputs (see Table 1). During light load condition, the ripple voltage of the power supplies may be higher than the rated specification and the output current sharing may not be balanced equally. The following table shows the recommended maximum VOUT output power.

Number of XLM 500s	N+1 Configuration
2	900 watts
3	1350 watts

Table 1 - Recommended Main Output Power for N+1 Configurations

#### **Connecting the boards**

- 1. With the two short red and black cables provided, the main output terminals, Vout and RTN, should be connected to +IN and -IN terminal on current sharing board respectively.
- 2. The +RS and -RS on the power supplies (8 pins connector CN1) should be connected to +S and -S on current sharing board with the provided 2 pins connector with blue and violet cables.
- 3. LS connectors on current sharing boards should be joined together with the provided red and black cables.

Refer to below diagrams for detail connection of the current sharing boards.

(For connection of more than three power supplies in parallel, please contact N2Power Sales.)

703598-01 Rev. 08.28.2019



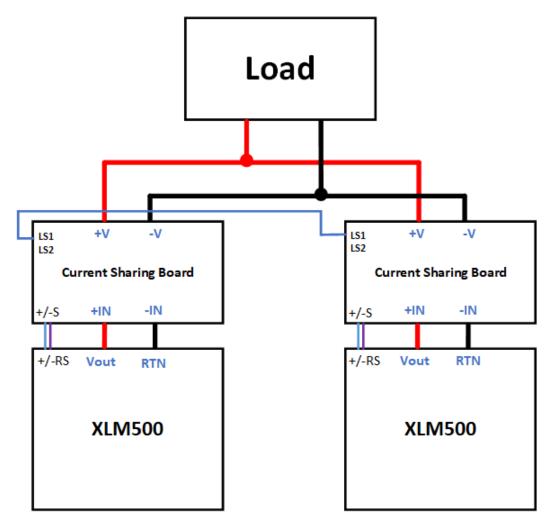


Figure 1 - Connection Diagram

Note: Each output voltage model of XLM500 model will have its corresponding current sharing board. For detail information, please refer to the "Ordering Information" at the last page.

703598-01 Rev. 08.28.2019 2



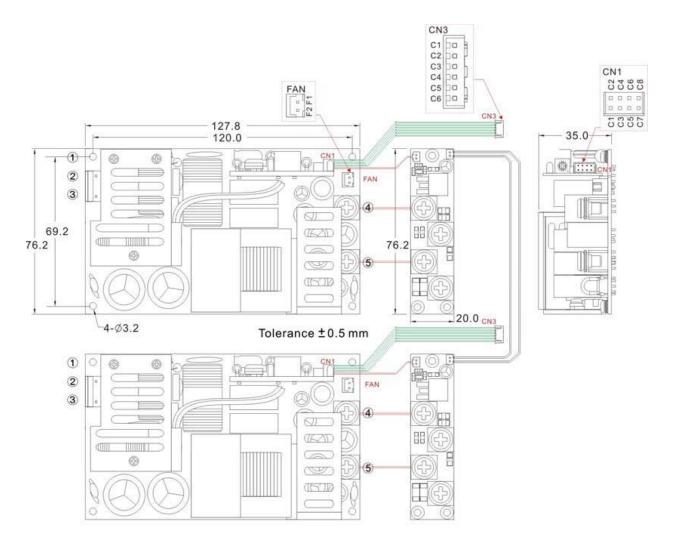


Figure 2 - Connection Diagram (2)

Connector Pin (CN1)				
Pin No.	Assignment			
C1	RTN (Return)			
C2	+5VSB (+5Vstandby)			
C3	RTN (Return)			
C4	DC_OK (Logic output,high-true)			
C5	RTN (Return)			
C6	ENABLE (Remote Enable)			
C7	-RS (Negative Remote Sense)			
C8	+RS (Positive Remote Sense)			

Connector Pin (CN3)			
Pin No.	Assignment		
C1	RTN (Return)		
C2	+5VSB (+5Vstandby)		
C3	RTN (Return)		
C4	DC_OK (Logic output,high-true)		
C5	RTN (Return)		
C6	ENABLE (Remote Enable)		

**Table 2 - Pin Definitions** 

703598-01 Rev. 08.28.2019 3



### **Ordering Information**

The following table provides the N2Power part numbers that should appear on your purchase order and will appear on any N2Power correspondence:

For the following power supply models	VOUT	Current Sharing Board	
		Part Number	
XLM 500-12	12V	400525-19-2	
XLM 500-15	15V	400525-20-0	
XLM 500-24	24V	400525-21-8	
XLM 500-48	48V	400525-22-6	

Table 3 - Part Numbers for XLM 500 Current Sharing Boards

All XLM 500 power supplies and accessories are RoHS compliant. For warranty information, refer to <a href="https://www.n2power.com">www.n2power.com</a>. Direct all questions, orders or requests for quotation as follows:

N2Power Order Desk:	orders@n2power.com	805-583-7744 x112
Fax (Attention N2Power):		805-583-7749
Sales:	sales@n2power.com	805-583-7744 x122
Technical Support:	techsupport@n2power.com	805-583-7744 x119
Address:	1267 Flynn Road	
	Camarillo, CA 93012	

703598-01 Rev. 08.28.2019 4