

MODULAR DC POWER SUPPLY FOR BURN-IN & PLATING APPLICATIONS MODEL 62000B SERIES

Chroma's new 62000B series of Modular DC Power Supplies offer many unique features for Burn-in and plating applications. The features include a N+1 redundancy, high power densities, hot-swappable maintenance, remote ON/OFF and programmable control via the CAN bus.

The 62000B's mainframe contains up to 5 different modules ranging from 1.5KW per module or up to 120KW, 2000A and 150V per system. The mainframe of the 62000B allows for up to six modules to be used parallel operation which allows system to that expanded up to eighty units. The 62000B is controllable via the CAN bus making them ideal for bulk power applications.

The Modular DC Power Supplies of 62000B are very cost effective with high power density and low current ripple. These instruments have be designed for burn-in applications such as the LCD panels, DC-DC converters, power inverters, notebook computers, battery chargers and many other types of electronic devices.

Modern power factor correction circuitry is incorporated in 62000B providing an input power factor above 0.98 to meet the IEC requirements. This PFC correction circuity not only reduces the input current but also raises the operating efficiency to over 80% Optional graphic SoftPanels and CAN bus control allow for control and monitoring of the power system using an easy to use graphical interface.

Modular DC Power Supply

MODEL 62000B SERIES

Key Features:

- Voltage range: 1 ~ 150V
- Current range: 0 ~ 2000A (System)
- Power range: 1.5KW per module up to 120KW per system
- N+1 Redundancy
- High Power Density
- $(464 \text{ mW} / \text{cm}^3 = 7.13 \text{ W/ln}^3)$
- Hot-swappable
 - Ideal for Burn-in & Plating
 - Remote Sense
- Remote ON / OFF
- CAN Bus Control
- DC OK Signal Output



Chroma

HOT-SWAP OPERATION

Equipped with the functionality of N+1 redundancy and hot-swap, the 62000B Series of modular DC power supplies are most applicable for 24 hours non-stop applications such as the SMD plating production lines, as well as product life burn-in test for IT products like DC converters, LCD backlight inverters and routers

For continuous operation applications the modular hot-swap design allows engineers to replace the failure unit on-site without shutting down the entire system.



HIGH POWER APPLICATIONS WITH CSU

The 62000B modular power supplies are capable of providing high power output up to 120KW with maximum current up to 2000A via CSU(Control & Supervisor Unit). Each chassis is designed to accommodate a maximum of 9KW and include current sharing capability to ensure system stability. In addition, for convenient control of even large power systems, a Control & Supervisor unit is provided to set and display output and protection circuits via a standard CAN bus communication protocol.

AVAILABLE POWER RATINGS								
Current Power Rating Rating Voltage Rating	9KW	18KW	27KW	36KW	45KW			
15V	540A	1080A	1620A	2160A	2700A			
30V	300A	600A	900A	1200A	1500A			
60V	150A	300A	450A	600A	750A			
80V	108A	216A	324A	432A	540A			
150V	60A	120A	180A	240A	300A			
Paralleled unit of mainframe	1	2	3	4	5			

Note: Contact the factory for more information on customization of high power system (>2000A).



Control & Supervisor Unit



PANEL DESCRIPTION



- **1. OUTPUT ENABLED LED**
- 2. FAULT INDICATOR
- **3. OUTPUT VOLTAGE READOUT**
- 4. VOLTAGE TRIMMER (1V-100%)
- 5. OUTPUT CURRENT READOUT
- 6. CURRENT TRIMMER (1A-100%)
- 7. MAINFRAME ENABLE/DISABLE SWITCH 14. AC INPUT TERMINAL BLOCK

- 8. CURRENT SHARING CONNECTOR
- 9. REMOTE SENSE CONNECTOR
- 10. I/O CONNECTOR (Includes remote ON/OFF, DC OK, AUX Power)
- **11. CAN DIP ADDRESS SWITCH**
- 12. CAN BUS COMMUNICATIONS PORT (Optional)
- **13. OUTPUT TERMINALS**

ORDERING INFORMATION

- 62015B-15-90 : DC Power Supply Module, 15V/90A/1350W 62015B-30-50 : DC Power Supply Module, 30V/50A/1500W
- * 62015B-60-25 : DC Power Supply Module, 60V/25A/1500W
- * 62015B-80-18 : DC Power Supply Module, 80V/18A/1440W
- * 62015B-150-10 : DC Power Supply Module, 150V/10A/1500W
- * 62000B-3-1 : Three Position 62000B Mainframe 62000B-6-1 : Six Position 62000B Mainframe
- * A620007 : Control & Supervisor Unit
- * A620008 : CAN Bus Interface
- * Model 62015B-60-25 will be available in November 2006.
- * Model 62015B-80-18 & 62015B-150-10 will be available in April 2007.
- * Model 62015B-3-1 & A620007 will be available in January 2007.

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SPECIFICATIONS								
Model	62015B-15-90	62015B-30-50	62015B-60-25	62015B-80-18	62015B-150-10			
Electrical Specifications								
Output Ratings								
Output Power	1350W	1500W	1500W	1440W	1500W			
Output Voltage	1~15V	1~30V	1~60V	1~80V	1~150V			
Voltage Setting (Factory Default)	12V	24V	48V	72V	110V			
Output Current	90A 50A 25A 18A 10A							
Line Regulation	0.1% FS							
Load Regulation ¹	1% FS							
Programming Accuracy	1% FS							
Measurement Accuracy	1% FS							
Output Noise (20MHz)								
Voltage Noise (P-P)	100mV	100mV	200mV	200mV	400mV			
Voltage Ripple (rms)	30mV	30mV	50mV	50mV	100mV			
Current Ripple (rms)	0.9A	0.5A	0.25A	0.18A	0.1A			
Efficiency	> 80% @ full load							
Turn on over shoot voltage ²	5% of nominal output							
Transient Response Time ³	< 5 ms							
AC Input Voltage								
Six Position Mainframe	187~250Vac (3 Phase 4 Wire,∆ Connection) or 323~437Vac (3 Phase 5 Wire, Y Connection)/45~65 Hz							
Three Position Mainframe	187 to 250Vac (single phase) / 45 - 65 Hz							
Input Power Factor	> 0.98@ full load							
Protection Function								
OVP	Automatically shuts down at 115% of set value							
OCP	Current limit (0~100%)/OCP Shutdown at 115% of FS							
OTP	Automatically shuts down if internal limit is reached							
I/O Signal								
Remote ON/OFF (I/P)	Dry contact (closed = enabled), vice versa.							
AUX Voltage	4~24V/0.5A at mainframe(by trimmer adjust voltage)							
DC OK Signal Type (O/P)	Dry contact (closed=enabled) (Error : OVP/OCP/OTP/AC Fault)							
General Specifications								
Remote Sensing	3V max. line loss compensation							
Parallel Operation	Current Sharing (+/-5%)							
Operating Temperature	0~50°C							
Humidity Range	0~90% RH. Non-condensing							
Remote Interface	CAN Bus (optional)							
Safety & EMC	CE							
Mainframe Dimensions (WxHxD)		443x175x531 mm or 17.5x6.88x21 inches						
Weight (Mainframe)		20 Kg or 44 lbs						
Module Dimensions (WxHxD)		132.5x65.9x370 mm or 5.25x2.6x15.4 inches						
Weight (Module)	3.7 Kg or 8.1 lbs							

All specifications are subject to change without notice.

Note 1: For 50% step load variation with remote sense at maximum output voltage

Note 2: based on rise time of 100ms

Note 3: Time for the output voltage to recover within 1% of its rated for a load changed of 25%

* Model 62015B-60-25 will be available in November 2006.

* Model 62015B-80-18 & 62015B-150-10 will be available in April 2007.

Developed and Manufactured by :

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