

## 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 mW / cm<sup>3</sup> = 7.13 W/ln<sup>3</sup>)
- Hot-swappable
- Ideal for Burn-in & Plating
- Remote Sense
- Remote ON / OFF
- CAN Bus Control
- DC OK Signal Output



## 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 been 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 circuitry 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.



**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**

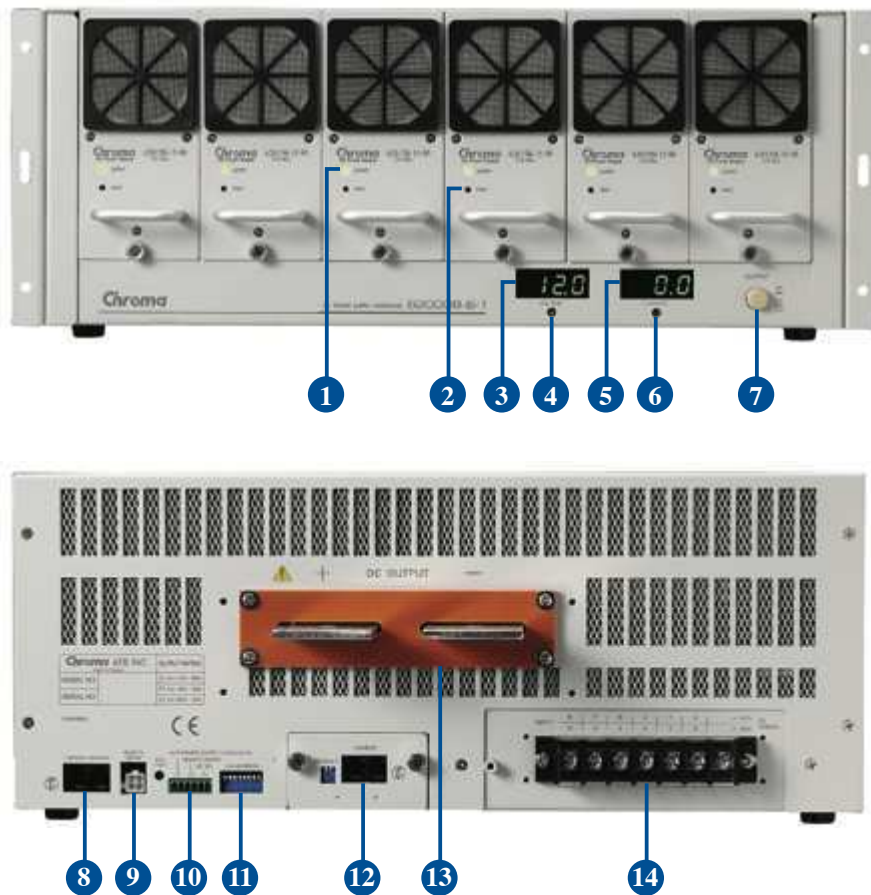
Current Rating \ Power Rating	9KW	18KW	27KW	36KW	45KW
<b>Voltage Rating</b>					
<b>15V</b>	540A	1080A	1620A	2160A	2700A
<b>30V</b>	300A	600A	900A	1200A	1500A
<b>60V</b>	150A	300A	450A	600A	750A
<b>80V</b>	108A	216A	324A	432A	540A
<b>150V</b>	60A	120A	180A	240A	300A
<b>Paralleled unit of mainframe</b>	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              | 8. CURRENT SHARING CONNECTOR                                 |
| 2. FAULT INDICATOR                 | 9. REMOTE SENSE CONNECTOR                                    |
| 3. OUTPUT VOLTAGE READOUT          | 10. I/O CONNECTOR (Includes remote ON/OFF, DC OK, AUX Power) |
| 4. VOLTAGE TRIMMER (1V-100%)       | 11. CAN DIP ADDRESS SWITCH                                   |
| 5. OUTPUT CURRENT READOUT          | 12. CAN BUS COMMUNICATIONS PORT (Optional)                   |
| 6. CURRENT TRIMMER (1A-100%)       | 13. OUTPUT TERMINALS   |
| 7. MAINFRAME ENABLE/DISABLE SWITCH | 14. AC INPUT TERMINAL BLOCK                                  |

## 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.

## SPECIFICATIONS

Model	62015B-15-90	62015B-30-50	62015B-60-25	62015B-80-18	62015B-150-10
<b>Electrical Specifications</b>					
<b>Output Ratings</b>					
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
<b>Line Regulation</b>	0.1% FS				
<b>Load Regulation</b> <sup>1</sup>	1% FS				
<b>Programming Accuracy</b>	1% FS				
<b>Measurement Accuracy</b>	1% FS				
<b>Output Noise (20MHz)</b>					
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
<b>Efficiency</b>	> 80% @ full load				
<b>Turn on over shoot voltage</b> <sup>2</sup>	5% of nominal output				
<b>Transient Response Time</b> <sup>3</sup>	< 5 ms				
<b>AC Input Voltage</b>					
Six Position Mainframe	187~250Vac (3 Phase 4 Wire, Δ 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				
<b>Protection Function</b>					
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				
<b>I/O Signal</b>					
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)				
<b>General Specifications</b>					
<b>Remote Sensing</b>	3V max. line loss compensation				
<b>Parallel Operation</b>	Current Sharing (+/-5%)				
<b>Operating Temperature</b>	0~50°C				
<b>Humidity Range</b>	0~90% RH. Non-condensing				
<b>Remote Interface</b>	CAN Bus (optional)				
<b>Safety &amp; EMC</b>	CE				
<b>Mainframe Dimensions (WxHxD)</b>	443x175x531 mm or 17.5x6.88x21 inches				
Weight (Mainframe)	20 Kg or 44 lbs				
<b>Module Dimensions (WxHxD)</b>	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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