
# PROGRAMMABLE DC POWER SUPPLY MODEL 62000L SERIES

The Chroma 62000L Series Programmable DC power supplies have low noise linear performance and fast transient response. The units have many unique functions that are targeted for overall automated test system integration, automotive power electronics MCU/ECU, power semiconductors, wireless communications, etc. The 62000L Series is a high quality yet cost effective programmable DC Source, designed to meet the stringent requirements of the next generation of power electronics.

The GPIB and USB control interfaces come standard with the 62000L Series, no additional purchase required. The 62000L Series can be easily remote controlled via either of these two interfaces. The 62000L weighs less than 2.5 kg, and its case measures 214.6Wx88.6H x280D mm. Its light weight and compact size makes it easy to handle and stack safely.

Auto-ranging allows you to freely adjust voltage and current. This feature eliminates the need to manually select the optimum range allowing all of the power to be available across all of the voltage and current settings

If there are applications that need voltages and currents greater than the rated maximum outputs, this can be achieved using multiple power supplies. The power supply can output an extended range of voltages or currents by connecting more units. Up to 7 units can be connected at the same time, using a series-parallel connection to achieve greater voltage (up to 252V) and current (up to 49A) output.

GPIB USB CE RoHS2 Compliant

## MODEL 62000L SERIES

### KEY FEATURES

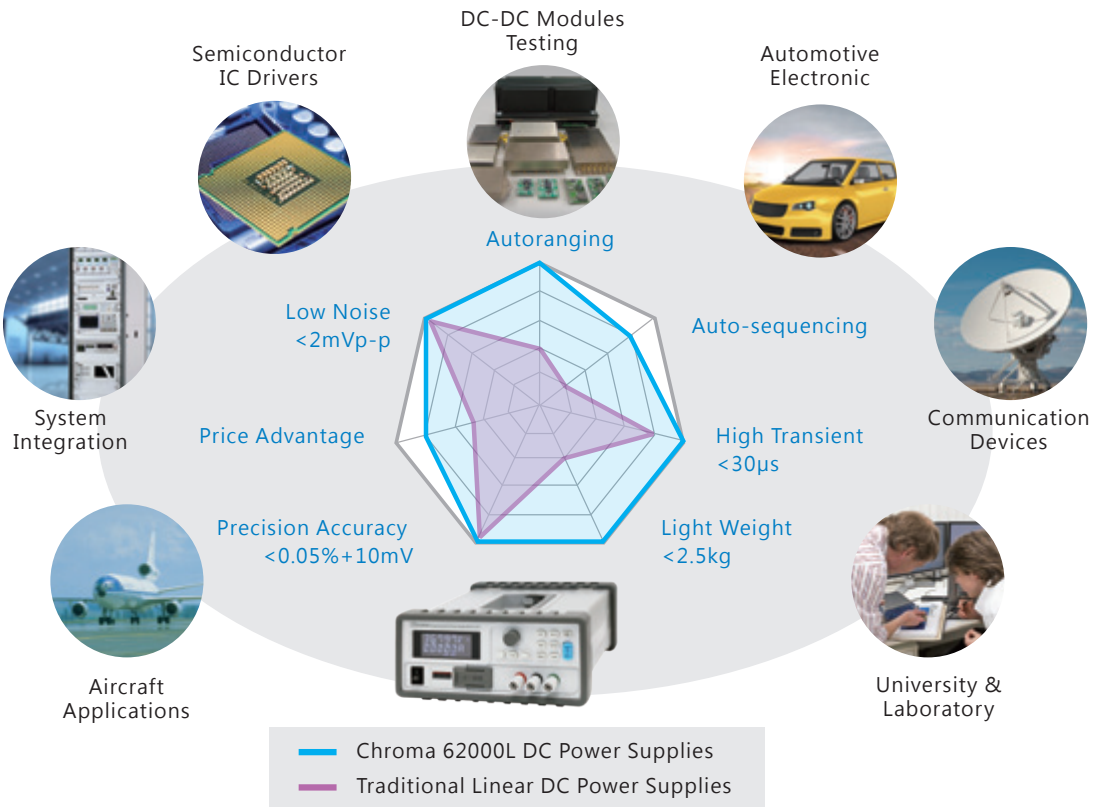
- Voltage range: 0 ~ 60V
  Current range: 0 ~ 7A
  Power range: 0 ~ 150W
- Wide range of voltage & current combinations in constant power
- Clean and stable power with programmability at an affordable price
- Low noise: < 3mVp-p
- High transient response time: < 50us
- High-speed programming
- Precision V&I measurements
- Standard GPIB/USB interface
- Remote sense (Model 62010L-36-7 only)
- Master-slave parallel and serial control (Model 62010L-36-7 only)
- 8 steps for auto sequencing programming
- 16 storage locations for user-defined operating states
- OVP, Current limit, Thermal protection
- CE Certified

### APPLICATIONS

- Laboratory and system integration
- Automotive electronic components
- University and 3C products
- Mobile, IC driving power, wireless and communication power
- Low noise for aircraft applications

Chroma

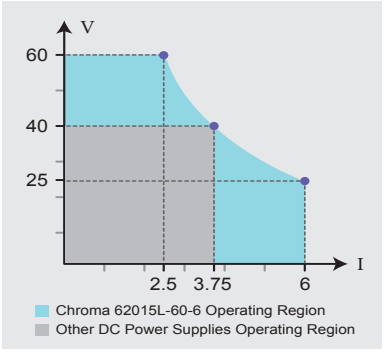
## 62000L FEATURES AND APPLICATIONS




## AUTORANGING OUTPUT

The 62000L Series Programmable DC power supplies have wide operating ranges. Chroma' s model 62015L-60-6 for example, the output specification 150W/60V/6A can operate under different combinations as the figure shows below while other common DC power supplies can only achieve the maximum output power of a single point.

For wide range voltage and current applications, one DC power supply can be used to test the input of both low voltage/high current and high voltage/low current UUTs. When integrated into a standard ATE, one 62000L series DC power supply can replace multiple DC power supplies to significantly reduce cost and save space.




Autoranging Output

## MASTER-SLAVE CONTROL

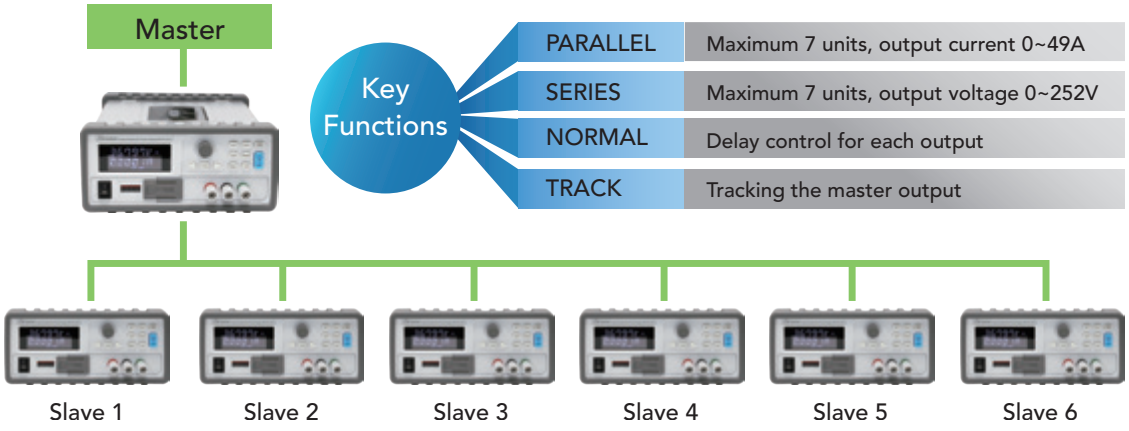
The 62000L Series master-slave control has 4 modes listed as follows :

Parallel Mode : The master-slave parallel control connects multiple power supplies to extend the current output.

Series Mode : The master-slave parallel control connects multiple power supplies to extend the voltage output.

Normal mode : The master-slave normal control follows the delay time set by each power supply to output from the master.

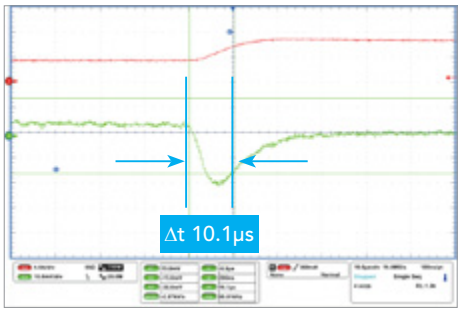
Track Mode : The master-slave track mode tracks each power supply to synchronize with the output voltage and status of master.



## HIGH TRANSIENT RESPONSE

The 62000L Series features the state-of-the-art DC power supply design with high transient response for output voltage. Take the model 62010L-36-7 for example, when the output current changes from 3.5A to 7A at the speed of 1A/us, the voltage change of actual output can return to 15mV within 10.1us.

For dynamic load change, the 62000L Series can quickly react in order to give a stable DC output, as well as reducing the surge voltage generated by load change that could damage the UUT. As to non-static products or test applications, the 62000L Series can timely provide a stable DC power supply.

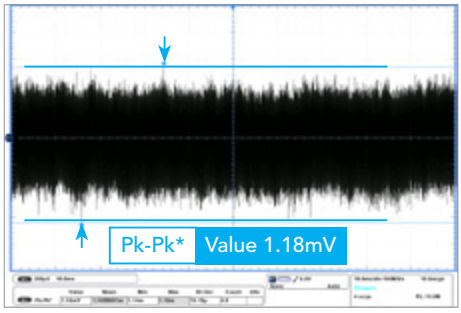


High Transient Response

## LOW OUTPUT NOISE

The 62000L Series provides pure and stable DC power. For example, the 62010L-36-7 output voltage noise is 1.18mVp-p (20~20MHz) under the maximum rated current and maximum output power.

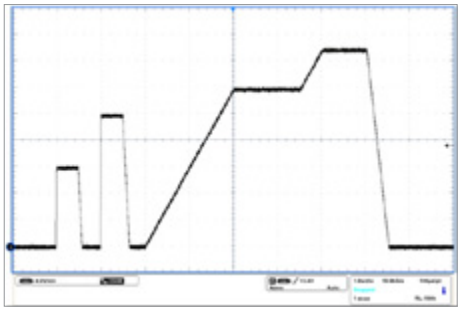
For precision products that require strict power quality, such as semiconductor testing and IC drive, the 62000L Series is able to comply with the product specification to protect the UUT from the interference of heavy noise providing low ripple and low noise input power with pure quality.



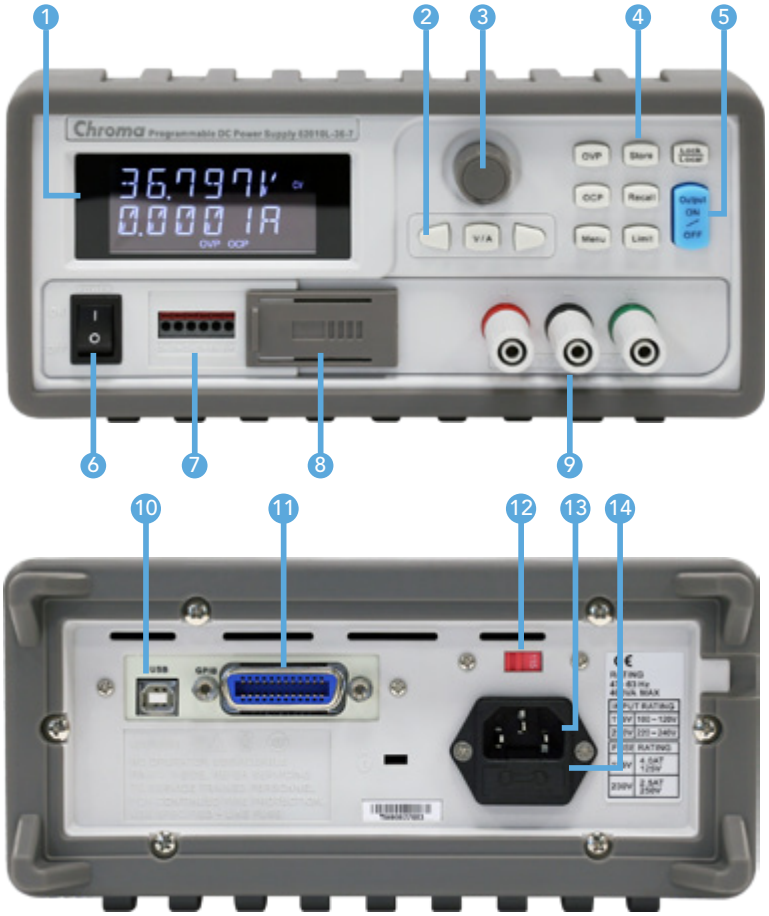
Low Output Noise

## AUTO SEQUENCING PROGRAMMING

The auto sequencing programming function built into the 62000L Series allows the user to define and edit the output waveforms and cycles desired. Using 8 steps per cycle, each step can set the time for voltage to rise or fall as well as to dwell. This function can also be applied to the waveform signal simulation test of power electronics and the power simulation test of automotive electronics by editing the required output voltages following the UUT test criteria.


Auto Sequencing Programming

## PANEL DESCRIPTION




1. Display
   Display setting, readings and operating status
2. Voltage/Current Key
   Set the output voltage/output current limit
3. Rotary Key
   Adjust the V&I and set the parameter
4. Function Key
   Operation function selection
5. Output Key
   Enable or disable the output
6. Power Switch
   AC power on/off
7. Master-Slave Mode and Remote Sense Terminal
   Set the Master-Slave series/parallel & remote sense (Model 62010L-36-7)
8. Cover
   Dust cover (Model 62010L-36-7)
9. Output Terminal
   Connect the output cable to a UUT
10. USB Interface (Standard)
11. GPIB Interface (Standard)
12. Power-Line Voltage Setting
    110V/220V AC setting
13. Power Line Inlet
14. Fuse Holder

## GENERAL SPECIFICATIONS

| Model | 62010L-36-7 | 62015L-60-6 |
|---|---|---|
| Output Ratings | | |
| Output Voltage | 0~36V | 0~60V |
| Output Current | 0~7A | 0~6A |
| Output Power | 108W | 150W |
| Line Regulation | | |
| Voltage | 0.01%+2mV | 0.01%+2mV |
| Current | 0.01%+250uA | 0.01%+250uA |
| Load Regulation | | |
| Voltage | < 0.01%+2mV | < 0.01%+2mV |
| Current | < 0.01%+250uA | < 0.01%+250uA |
| Measurement Accuracy | | |
| Voltage | 0.05%+5mV | 0.05%+5mV |
| Current | 0.15%+5mA | 0.15%+5mA |
| Output Noise & Ripple | | |
| Voltage Noise (p-p) | < 2mVp-p | < 3mVp-p |
| Voltage Ripple (rms) | < 0.35mVrms | < 0.5mVrms |
| Current Ripple (rms) | < 2mArms | < 2mArms |
| Transient Response Time | | |
| 100% to 50% load change | < 30usec | < 50usec |
| Temperature Coefficient | | |
| Voltage | 0.01%+3mV | 0.01%+10mV |
| Current | 0.02%+3mA | 0.02%+3mA |
| Drift | | |
| Voltage | 0.02%+1mV | 0.05%+10mV |
| Current | 0.1%+1mA | 0.15%+2mA |
| Programming & Measurement Resolution | | |
| Voltage (Front Panel) | 1mV | 10mV |
| Current (Front Panel) | 0.1mA | 1mA |
| Voltage (Remote Interface) | 1mV | 1mV |
| Current (Remote Interface) | 0.1mA | 0.21mA |
| Voltage (Analog Programming Interface) | 1mV | 1mV |
| Current (Analog Programming Interface) | 0.21mA | 1mA |
| Programming Accuracy | | |
| Voltage | 0.05%+10mV | 0.05%+10mV |
| Current | 0.2%+10mA | 0.2%+10mA |
| Programming Response Time | | |
| Rise Time (Full Load) | < 40ms | < 100ms |
| Rise Time (No Load) | < 20ms | < 35ms |
| Fall Time (Full Load) | < 40ms | < 50ms |
| Fall Time (No Load) | < 400ms | < 500ms |
| Measure Voltage, Current (under GPIB command using Measure) | < 20ms | < 20ms |
| AC Input Operating Voltage Range | 1$\phi$ 100~120Vac $\pm$ 10% $V_{LN}$, 1$\phi$ 220~240Vac $\pm$ 10% $V_{LN}$, 47~63 Hz | |
| Interfaces | USB & GPIB standard | |
| Dimension (H x W x D) | 88.6 x 214.6 x 280.7 mm/3.49 x 8.45 x 11.05 inch | |
| Weight | < 2.5 kg/5.5 lbs | |

* All specifications are subject to change without notice.

## ORDERING INFORMATION

62010L-36-7 : Programmable DC Power Supply 36V/7A/108W with GPIB & USB Interface

62015L-60-6 : Programmable DC Power Supply 60V/6A/150W with GPIB & USB Interface

B620001 : 19" Rack Mounting Kit for Model 62000L Series (2U model x 1)


HEADQUARTERS
CHROMA ATE INC.
66 Huaya 1st Road,
Guishan, Taoyuan
33383, Taiwan
T +886-3-327-9999
F +886-3-327-8898
www.chromaate.com
info@chromaate.com

U.S.A.
CHROMA SYSTEMS
SOLUTIONS, INC.
19772 Pauling,
Foothill Ranch,
CA 92610
T +1-949-600-6400
F +1-949-600-6401
www.chromausa.com
sales@chromausa.com

EUROPE
CHROMA ATE
EUROPE B.V.
Morsestraat 32,
6716 AH Ede,
The Netherlands
T +31-318-648282
F +31-318-648288
www.chromaeu.com
sales@chromaeu.com

JAPAN
CHROMA JAPAN CORP.
888 Nippa-cho, Kouhoku-ku,
Yokohama-shi, Kanagawa,
223-0057 Japan
T +81-45-542-1118
F +81-45-542-1080
www.chroma.co.jp
info@chroma.co.jp

CHINA
CHROMA ELECTRONICS
(SHENZHEN) CO., LTD.
8F, No.4, Nanyou Tian An
Industrial Estate, Shenzhen,
China PC: 518052
T +86-755-2664-4598
F +86-755-2641-9620
www.chroma.com.cn
info@chromaate.com

SOUTHEAST ASIA
QUANTEL PTE LTD.
(A company of Chroma Group)
46 Lorong 17 Geylang # 05-02
Enterprise Industrial Building,
Singapore 388568
T +65-6745-3200
F +65-6745-9764
www.quantel-global.com
sales@sg.quantel-global.com

CHROMA ATE GERMANY
Südtiroler Str. 9, 86165, Augsburg, Germany
T +49-821-790967-0
F +49-821-790967-600
support-germany@chromaeu.com