



KEY FEATURES

- Power range: 5KW / 10KW / 15KW
- Voltage range: 0 ~ 1000V
- Current range: 0 ~ 375A
- High power density (15KW in 3U)
- Easy Master / Slave parallel & series operation up to 150KW
- Precision V&I Measurements
- High-speed programming
- Voltage & Current Slew Rate Control
- Digital encoder knobs, keypad and function keys
- Current sharing operation
- Voltage ramp function (time range: 10 ms ~ 99 hours)
- Auto Sequencing Programming: 10 Programs / 100 Sequences
- OVP, Current Limit, Thermal protection
- Standard Analog Programming interface
- Standard USB / RS-232 / RS485 interface
- Optional GPIB / Ethernet interface
- Remote output ON / OFF (I / P)
- Remote sense line drop compensation
- LabView and Labwindows
- CE Certified

Chroma's new 62000H Series of programmable DC power supplies offer many unique advantages for telecom, automated test system & integration, industrial, battery charge & simulation for hybrid cars and solar panel simulation. These advantage include high power density of 15KW in 3U, precision readback of output current and voltage, output trigger signals as well as the ability to create complex DC transients waveforms to test device behavior to spikes, drops, and other voltage deviations.

The 62000H series DC power supply are very easy to operate either from the front panel keypad or from the remote controller via USB / RS-232 / RS485 / APG (Standard) and GPIB & Ethernet (optional). Its compact size with 3U only can be stacked on a bench in a standard rack without any difficulties.

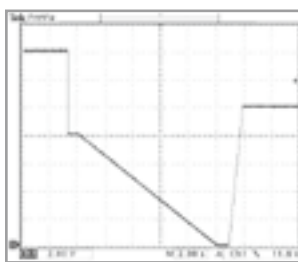
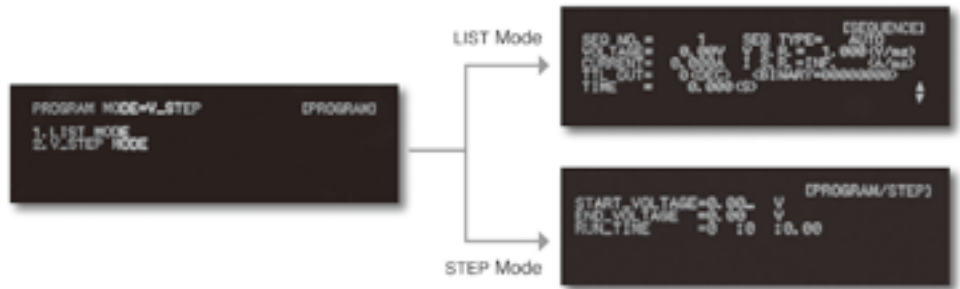
The 62000H Series includes 12 different models ranging from 5KW to 15KW, with current ranges up to 375A and voltage ranges up to 600V. The 62000H can easily parallel up to ten units capable of 150KW with current sharing for bulk power applications, for example, battery bank simulation of 450V/150A/67.5KW for electric vehicle and military use.

Another unique capability of the 62000H supplies is their ability to create complex DC transient waveforms. This capability allows devices to be tested to DC voltage dropouts, spikes and other voltage variations making them an ideal choice for aerospace device testing, inverter testing and other devices which will experience voltage interrupts. Applications include DC/DC Converter & Inverter voltage drop test, engine start-up simulation, battery automated charging, electronic product life cycle test, etc.

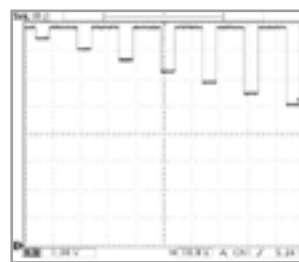
There are 100 user programmable input status on the front panel for automated test application and life cycle ON/OFF test. In addition, the 62000H has a 16 bit digital control with bright vacuum fluorescent display readout.



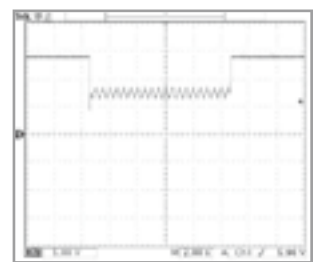
Master/Slave Parallel Operation - 150kW



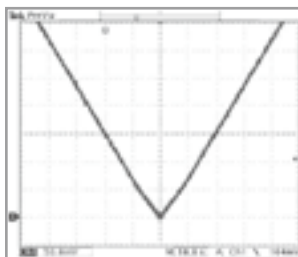
Battery Voltage Dropout



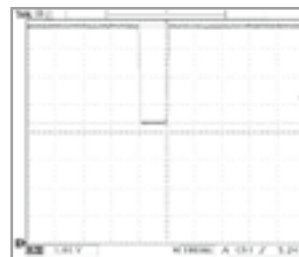
Reset Behavior at Voltage Drop of ISO 16750-2



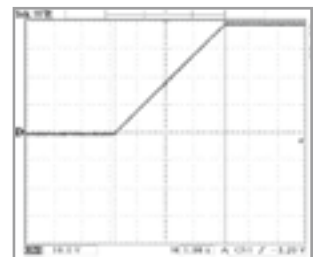
Engine Starting Profile of ISO 16750-2



Battery Voltage Slow Decrease & Decrease profile



Telecom Converter Sag Testing



Output Voltage Slew Rate Control

ELECTRICAL SPECIFICATIONS -1						
Model	62075H-30	62050H-40	62050H-450	62050H-600	62100H-30	62100H-40
Output Ratings						
Output Voltage	0-30V	0-40V	0-450V	0-600V	0-30V	0-40V
Output Current	0-250A	0-125A	0-11.5A	0-8.5A	0-375A	0-250A
Output Power	7500W	5000W	5000W	5000W	11250W	10000W
Line Regulation						
Voltage	± 0.01% F.S.					
Current	± 0.05% F.S.					
Load Regulation						
Voltage	± 0.02% F.S.					
Current	± 0.1% F.S.					
Voltage Measurement						
Range	6V / 30V	8V / 40V	90V / 450V	120V / 600V	6V / 30V	8V / 40V
Accuracy	0.05% + 0.05% F.S.					
Current Measurement						
Range	50A / 250A	25A / 125A	2.3A / 11.5A	1.7A / 8.5A	75A / 375A	50A / 250A
Accuracy	0.1% + 0.1% F.S.					
Output Noise & Ripple						
Voltage Noise (P-P)	60mV	60mV	300mV	350mV	60mV	60mV
Voltage Ripple (rms)	15mV	15mV	450mV	600mV	15mV	15mV
Current Ripple (rms)	100mA	50mA	20mA	15mA	150mA	100mA
OVP Adjustment Range						
Range	0-110% programmable from front panel or optional digital inputs.					
Accuracy	± 1% of full-scale output					
Programming Response Time						
Rise Time: Full Load	6ms	8ms	60ms	60ms	6ms	8ms
Rise Time: No Load	6ms	8ms	60ms	60ms	6ms	8ms
Fall Time: Full Load	6ms	8ms	60ms	60ms	6ms	8ms
Fall Time: 10% Load	100ms	100ms	250ms	250ms	100ms	100ms
Fall Time: No Load	1s	1s	2.5s	2.5s	1s	1s
Slew Rate Control						
Voltage slew rate range	0.001V/ms - 5V/ms	0.001V/ms - 5V/ms	0.001V/ms - 7.5V/ms	0.001V/ms - 10V/ms	0.001V/ms - 5V/ms	0.001V/ms - 5V/ms
Current slew rate range	0.001A - 1A/ms, or INF	0.001A - 1A/ms, or INF	0.001A - 0.1A/ms, or INF	0.001A - 0.1A/ms, or INF	0.001A - 1A/ms, or INF	0.001A - 1A/ms, or INF
Minimum transition time	0.5ms					
Transient Response Time	Recovers within 1ms to +/- 0.75% of steady-state output for a 50% to 100% or 100% to 50% load change(1A/μs)					
Efficiency	0.87(Typical)					
Drift (30 minutes)						
Voltage	0.04% of Vmax					
Current	0.06% of Imax					
Drift (8 hours)						
Voltage	0.02% of Vmax					
Current	0.04% of Imax					
Temperature Coefficient						
Voltage	0.04% of Vmax/°C					
Current	0.06% of Imax/°C					

Photovoltaic Test Equipment
 Semiconductor/C Test Equipment
 LED Test Equipment
 LCD/LCM Test Equipment
 Video & Color Test Equipment
 Optical Inspection Equipment
 Power Electronics Test Equipment
 Passive Components Test Instruments
 Electrical Safety Test Instruments
 General Purpose Test Instruments
 PXI Instruments & Systems

ELECTRICAL SPECIFICATIONS -2					
Model	62100H-450	62100H-600	62150H-40	62150H-450	62150H-600
Output Ratings					
Output Voltage	0-450V	0-600V	0-40V	0-450V	0-600V
Output Current	0-23A	0-17A	0-375A	0-34A	0-25A
Output Power	10000W	10000W	15000W	15000W	15000W
Line Regulation					
Voltage	± 0.01% F.S.				
Current	± 0.05% F.S.				
Load Regulation					
Voltage	± 0.02% F.S.				
Current	± 0.1% F.S.				
Voltage Measurement					
Range	90V/450V	120V/600V	8V/40V	90V/450V	120V/600V
Accuracy	0.05% + 0.05%F.S.				
Current Measurement					
Range	4.6A/23A	3.2A/17A	75A/375A	6.8A/34A	5A/25A
Accuracy	0.1% + 0.1%F.S.				
Output Noise & Ripple					
Voltage Noise(P-P)	300mV	350mV	60mV	300mV	350mV
Voltage Ripple(rms)	450mV	600mV	15mV	450mV	600mV
Current Ripple(rms)	40mA	30mA	150mA	60mA	45mA
OVP Adjustment Range					
Range	0-110% programmable from front panel or digital				
Accuracy	± 1% of full-scale output				
Programming Response Time					
Rise Time:Full Load	60ms	60ms	8ms	60ms	60ms
Rise Time:No Load	60ms	60ms	8ms	60ms	60ms
Fall Time: Full Load	60ms	60ms	8ms	60ms	60ms
Fall Time: 10% Load	250ms	250ms	100ms	250ms	250ms
Fall Time: No Load	2.5s	2.5s	1s	2.5s	2.5s
Slew Rate Control					
Voltage slew rate range	0.001V/ms - 7.5V/ms	0.001V/ms - 10V/ms	0.001V/ms - 5V/ms	0.001V/ms - 7.5V/ms	0.001V/ms - 10V/ms
Current slew rate range	0.001A - 0.1A/ms, or INF	0.001A - 0.1A/ms, or INF	0.001A - 1A/ms, or INF	0.001A -0.1A/ms, or INF	0.001A -0.1A/ms, or INF
Minimum transition time	0.5ms				
Transient Response Time	Recovers within 1ms to +/- 0.75% of steady-state output for a 50% to 100% or 100% to 50% load change(1A/μs)				
Efficiency	0.87(Typical)				
Drift (30 minutes)					
Voltage	0.04% of Vmax				
Current	0.06% of Imax				
Drift (8 hours)					
Voltage	0.02% of Vmax				
Current	0.04% of Imax				
Temperature Coefficient					
Voltage	0.04% of Vmax/°C				
Current	0.06% of Imax/°C				

ORDERING INFORMATION

Power Rating	62000H Series Programmable DC Power Supply
5KW	62050H-40 : Programmable DC Power Supply 40V/125A/5KW
	62050H-450 : Programmable DC Power Supply 450V/11.5A/5KW
	62050H-600 : Programmable DC Power Supply 600V/8.5A/5KW
10KW	62075H-30 : Programmable DC Power Supply 30V/250A/7.5KW
	62100H-30 : Programmable DC Power Supply 30V/375A/11KW
	62100H-40 : Programmable DC Power Supply 40V/250A/10KW
	62100H-450 : Programmable DC Power Supply 450V/23A/10KW
	62100H-600 : Programmable DC Power Supply 600V/17A/10KW
15KW	62150H-40 : Programmable DC Power Supply 40V/375A/15KW
	62150H-450 : Programmable DC Power Supply 450V/34A/15KW
	62150H-600 : Programmable DC Power Supply 600V/25A/15KW
Options	A620024 : GPIB Interface for 62000H series (Factory installed)
	A620025 : Ethernet Interface for 62000H series (Factory installed)
	A620026 : Rack Mounting kit for 62000H series

Note 1 : Please specify GPIB or Ethernet Interface (alternative) at time of order.

Note 2 : All models output power are available for 380/400Vac line voltage.

GENERAL SPECIFICATIONS			
Programming & Measurement Resolution			
Voltage (Front Panel)		10 mV	
Current (Front Panel)		10 mA	
Voltage (Digital Interface)		0.002% of Vmax	
Current (Digital Interface)		0.002% of Imax	
Voltage (Analog Interface)		0.04% of Vmax	
Current (Analog Interface)		0.04% of Imax	
Remote Interface			
Analog programming		Standard	
USB		Standard	
RS-232		Standard	
RS485		Standard	
GPIB		Optional	
Ethernet		Optional	
System BUS(CAN)		Standard for master/slave control	
Programming Accuracy			
Voltage (Front Panel and Digital Interface)		0.1% of Vmax	
Current (Front Panel and Digital Interface)		0.3% of Imax	
Voltage (Analog Interface)		0.2% of Vmax	
Current (Analog Interface)		0.3% of Imax	
GPIB Command Response Time			
Vout setting		GPIB send command to DC source receiver <20ms	
Measure V & I		Under GPIB command using Measure <25ms	
Analog Interface (I/O)			
Voltage and Current Programming inputs (I/P)		0-10Vdc / 0-5Vdc / 0-5k ohm / 4-20 mA of F.S.	
Voltage and Current monitor output (O/P)		0-10Vdc / 0-5Vdc / 4-20mA of F.S.	
External ON/OFF (I/P)		TTL:Active Low or High(Selective)	
DC_ON Signal (O/P)		Level by user define. (Time delay = 1 ms at voltage slew rate of 10V/ms.)	
CV or CC mode Indicator (O/P)		TTL Level High=CV mode ; TTL Level Low= CC mode	
OTP Indicator (O/P)		TTL: Active Low	
System Fault indicator(O/P)		TTL: Active Low	
Auxiliary power supply(O/P)		Nominal supply voltage : 12Vdc / Maximum current sink capability: 10mA	
Safety interlock(I/P)		Time accuracy: <100ms	
Remote inhibit(I/P)		TTL: Active Low	
Series & Parallel Operation*1		Master / Slave control via CAN for 10 units up to 150KW. (Series: two units / Parallel: ten units)	
Auto Sequencing(List Mode)			
Number of program		10	
Number of sequence		100	
Dwell time Range		5ms - 15000S	
Trig. Source		Manual / Auto / External	
Auto Sequencing (Step Mode)			
Start voltage		0 to Full scale	
End voltage		0 to Full scale	
Run time		10ms - 99hours	
Input Specification			
AC input voltage 3phase , 3 wire + ground		380/400 Vac(operating range 342 - 440 Vac)	
AC frequency range		47-63 Hz	
Max Current (each phase)	380/400 Vac	5KW Model : 22A	10KW Model : 37A 15KW Model : 50A
General Specification			
Maximum Remote Sense Line Drop Compensation		<100V model: 5% of full scale voltage per line(10% total) >100V model :2% of full scale voltage per line (4% total)	
Operating Temperature Range		0°C ~ 50°C	
Storage Temperature Range		-40°C ~ +85°C	
Dimension (HxWxD)		132.8 x 428 x 610 mm / 5.23 x 16.85 x 24.02 inch	
Weight		5KW Model : Approx. 23 kg / 50.66 lbs 10KW Model : Approx. 29 kg / 63.88 lbs 15KW Model : Approx. 35 kg / 77.09 lbs	

Note*1 : To parallel more than 5 units, contact factory.

Photovoltaic
Test Equipment

Semiconductor/I/C
Test Equipment

LED
Test Equipment

LOD/LCM
Test Equipment

Video & Color
Test Equipment

Optical Inspection
Equipment

Power Electronics
Test Equipment

Passive Component
Test Instruments

Electrical Safety
Test Instruments

General Purpose
Test Instruments

PXI Instruments
& Systems