KEY FEATURES

- Power Rating : 1800W, 3600W, 4500W
- Voltage Range : 50Vrms ~ 350Vrms
- Current Range : Up to 18Arms, 36Arms, 45Arms
- Peak Current : Up to 54A, 108A, 135A
- Parallel / 3-Phase Function (AC mode only)
- Frequency Range : 45 ~ 440Hz, DC
- Crest Factor Range : 1.414 ~ 5.0
- Power Factor Range : 0 ~ 1 lead or lag (Rectified mode)
- CC, CR, CV, CP for DC Loading
- Constant & Rectified Load Modes for AC Loading
- Analog Voltage & Current Monitor
- Timing Measurement for Battery, UPS, Fuse and Breaker tests
- Measurement : V, I, PF, CF, P, Q, S, F, R, Ip+/- and THDv
- Short circuit simulation
- Full Protection : OC, OP, OT protection and OV alarm

Chroma's 63800 Series AC&DC Electronic Loads are designed for testing uninterruptible power supplies(UPS), Off-Grid Inverters, AC sources and other power devices such as switches, circuit breakers, fuses and connectors.

The Chroma 63800 Loads can simulate load conditions under high crest factor and varying power factors with real time compensation even when the voltage waveform is distorted. This special feature provides real world simulation capability and prevents over-stressing thereby giving reliable and unbiased test results.

RS-232 GPIB CE

The 63800's state of the art design uses DSP technology to simulate non-linear rectified loads with its unique RLC operation mode. This mode improves stability by detecting the impedance of the UUT and dynamically adjusting the load's control bandwidth to ensure system stability.

Comprehensive measurements allow users to monitor the output performance of the UUT. Additionally, voltage & current signals can be routed to an oscilloscope through analog outputs. The instrument's GPIB/RS-232 interface options provide remote control & monitor for system integration. Built-in digital outputs may also be used to control external relays for short circuit (crowbar) testing.

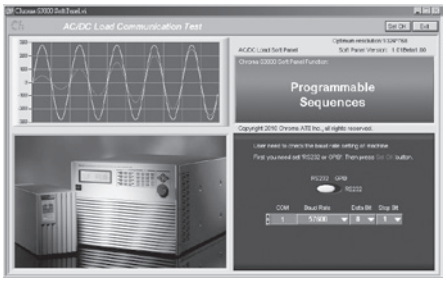
Chroma's 63800 Loads feature fan speed control ensuring low acoustic noise. The diagnosis/ protection functions include self-diagnosis routines and protection against over-power, over-current, over-temperature and alarm indicating over-voltage.

Parallel / 3-Phase Control

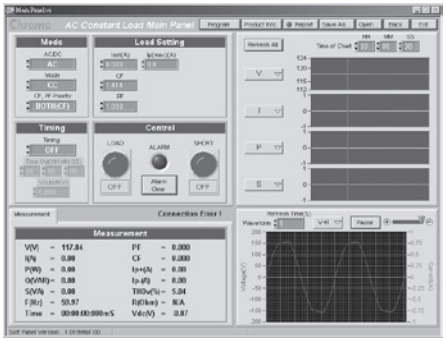
The 63800 series provides parallel and 3-phase functions for high power and three phase applications. All the models within the 63800 series can be used together for both parallel and 3-phase functions as well as paralleled AC Load units in a 3-phase configuration, providing excellent flexibility and cost savings for the 63800 series AC load. Parallel and 3-phase controls are made easy by linking the AC Load units together and control of all AC load units is performed through the Master Unit.

63802

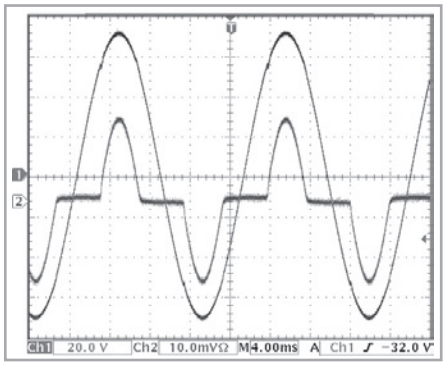
Softpanel

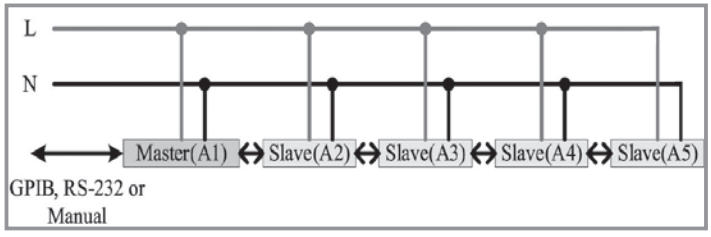


Main Operation Menu



AC Load

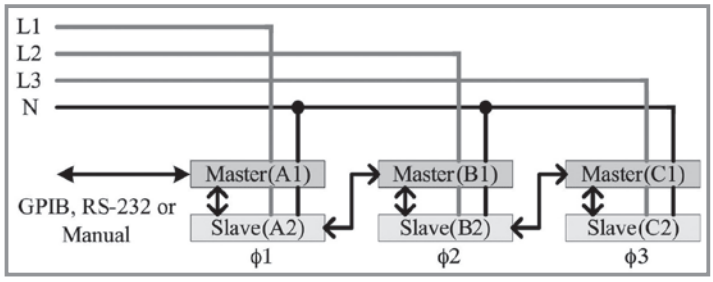




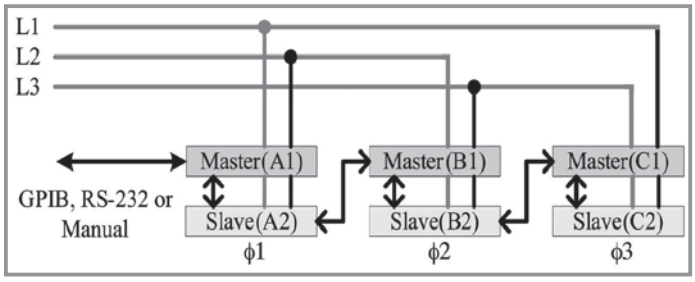
Parallel connection

ORDERING INFORMATION

63802 : Programmable AC & DC Electronic Load 350V/18A/1800W
63803 : Programmable AC & DC Electronic Load 350V/36A/3600W
63804 : Programmable AC & DC Electronic Load 350V/45A/4500W
A638001 : Rack Mounting Kit for Model 63802
A638002 : Rack Mounting Kit for Model 63803/63804



Parallel/3-Phase Y connection



Parallel/3-Phase Delta connection

SPECIFICATIONS			
Model	**63802**	**63803**	**63804**
Power	**1800W**	**3600W**	**4500W**
Current	0 ~ 18Arms (54 Apeak, continue)	0 ~ 36Arms (108 Apeak, continue)	0 ~ 45Arms (135 Apeak, continue)
Voltage*1	50 ~ 350Vrms (500 Vpeak)	50 ~ 350Vrms (500 Vpeak)	50 ~ 350Vrms (500 Vpeak)
Frequency	45 ~ 440Hz, DC	45 ~ 440Hz, DC	45 ~ 440Hz, DC
AC Section			
Constant Current Mode			
Range	0 ~ 18Arms, Programmable	0 ~ 36Arms, Programmable	0 ~ 45Arms, Programmable
Accuracy	0.1% + 0.2%F.S.	0.1% + 0.2%F.S.	0.1% + 0.2%F.S.
Resloution	2mA	5mA	5mA
Constant Resistance Mode			
Range	2.77Ω ~ 2.5kΩ, Programmable	1.39Ω~2.5kΩ, Programmable	1.11Ω~2.5kΩ, Programmable
Accuracy	0.5% + 0.5%F.S.	0.5% + 0.5%F.S.	0.5% + 0.5%F.S.
Resloution*2	20μS	50μS	50μS
Constant Power Mode			
Range	1800W, Programmable	3600W, Programmable	4500W, Programmable
Accuracy	0.5% + 0.5%F.S.	0.2% + 0.3%F.S.	0.2% + 0.3%F.S.
Resloution	0.375W	1.125W	1.125W
Crest Factor (under CC, CP modes)			
Range	1.414 ~ 5.0, Programmable	1.414 ~ 5.0, Programmable	1.414 ~ 5.0, Programmable
Accuracy	(0.5% / Irms) + 1% F.S.	(0.5% / Irms) + 1%F.S.	(0.5% / Irms) + 1%F.S.
Resloution	0.005	0.005	0.005
Power Factor			
Range	0 ~ 1 lead or lag, Programmable	0 ~ 1 lead or lag, Programmable	0 ~ 1 lead or lag, Programmable
Accuracy	1%F.S.	1%F.S.	1%F.S.
Resloution	0.001	0.001	0.001
Rectified Load Mode			
Operating Frequency	45Hz ~ 70Hz		
RLC Mode	Parameter : Ip(max), R_S, L_S, C, R_L		
Constant Power Mode	Parameter : Ip(max), Power setting=200W ~ 1800W, PF=0.4 ~ 0.75	Parameter : Ip(max), Power setting=200W ~ 3600W, PF=0.4 ~ 0.75	Parameter : Ip(max), Power setting=200W ~ 4500W, PF=0.4 ~ 0.75
Inrush Current Mode	Parameter : Ip(max), R_S, L_S, C, R_L, Phase		
	80A (peak current)	160A (peak current)	200A (peak current)
R_S Range	0 ~ 9.999Ω	0 ~ 9.999Ω	0 ~ 9.999Ω
L_S Range	0 ~ 9999μH	0 ~ 9999μH	0 ~ 9999μH
C Range	100 ~ 9999μF	100 ~ 9999μF	100 ~ 9999μF
R_L Range	2.77 ~ 9999.99Ω	1.39 ~ 9999.99Ω	1.11 ~ 9999.99Ω
DC Section			
Voltage Range	7.5V ~ 500V	7.5V ~ 500V	7.5V ~ 500V
Current Range	0A ~ 18A	0A ~ 36A	0A ~ 45A
Min. operating voltage	7.5V	7.5V	7.5V
Rise time	75μs	75μs	75μs
Operating Mode	CC, CV, CR, CP, DC Rectified		
Short Circuit Simulation	Use the CR mode loading under max. power rating		
Measurement Section			
DVM Range	$350V_{rms}$ ($500V_{peak}$)	$350V_{rms}$ ($500V_{peak}$)	$350V_{rms}$ ($500V_{peak}$)
DVM Accuracy	0.1% + 0.1%F.S.	0.1% + 0.1%F.S.	0.1% + 0.1%F.S.
DVM Resloution	10mV	10mV	10mV
DAM Range	$18A_{rms}$ ($80A_{peak}$)	$36A_{rms}$ ($160A_{peak}$)	$45A_{rms}$ ($200A_{peak}$)
DAM Accuracy(<70Hz)	0.1% + 0.2%F.S.	0.1% + 0.2%F.S.	0.1% + 0.2%F.S.
DAM Accuracy(>70Hz)	0.1% (1+CF^2 x kHz)+0.2% F.S.	0.1% (1+CF^2 x kHz)+0.2% F.S.	0.1% (1+CF^2 x kHz)+0.2% F.S.
DAM Resloution	1.0mA	2.5mA	2.5mA
Other Parameter	P(W), S(VA), Q(VAR), CF, PF, Freq, R, Ip-, Ip+, THDv		
Others			
Vmonitor	±500V / ±10V (Isolated)	±500V / ±10V (Isolated)	±500V / ±10V (Isolated)
Imonitor	±80A / ±10V (Isolated)	±200A / ±10V (Isolated)	±200A / ±10V (Isolated)
Protection *1	OCP : 19.2Arms ; OV alarm: 360Vrms (DC : 510VDC) OPP : 1920W ; OTP	OCP : 38.4Arms ; OV alarm: 360Vrms (DC : 510VDC) OPP : 3840W ; OTP	OCP : 48Arms ; OV alarm: 360Vrms (DC : 510VDC) OPP : 4800W ; OTP
Remote Interface	GPIB, RS-232		
Input Rating	1Ø 100~115Vac ± 10% V_{LN}, 47~63Hz ; 1Ø 200~230Vac ± 10% V_{LN}, 47~63Hz		
Dimension (H x W x D)	177 x 440 x 595 mm / 7.0 x 17.32 x 23.42 inch	310 x 440 x 595 mm / 12.2 x 17.32 x 23.42 inch	310 x 440 x 595 mm / 12.2 x 17.32 x 23.42 inch
Weight	37kg / 81.57 lbs	66 kg / 145.5 lbs	66 kg / 145.5 lbs

NOTE*1 : If the operating voltage exceeds the rated voltage for 1.1 times, it would cause permanent damage to the device.
NOTE*2 : S (siemens) is the SI unit of conductance, equal to one reciprocal ohm.

All specifications are subject to change without notice.