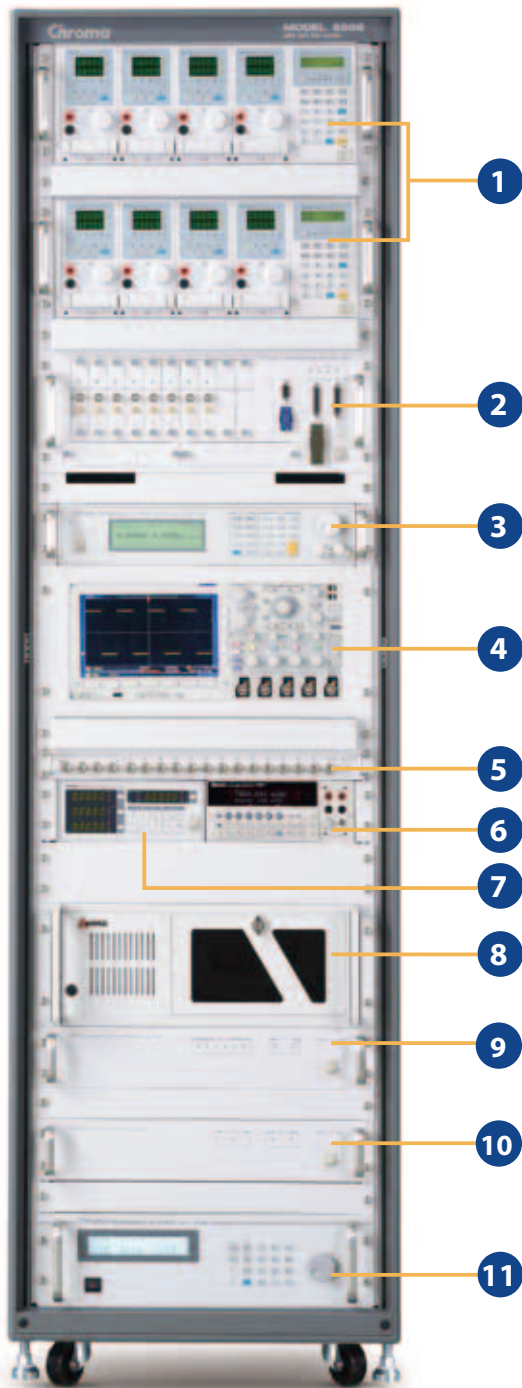


High Performance Hardware Devices



1. **Electronic Load** : Model 6310A / 6330A / 63200 / 63600 series
2. **Timing / Noise Analyzer** : Model 6011 / 80611
3. **DC Power Source** : Model 62000P / 62000H series
4. **Digital Storage Oscilloscope** : TDS-3000/TDS-5000/TDS-7000 series ; Other types or brands of DSO supported upon request
5. **Relay Multiplexer Box** : Model A800043
6. **Digital Multi-Meter** : Chroma 12061; Agilent - 34401A ; Other types or brand of DMM supported upon request
7. **Power Analyzer / Meter** : Model 6630 / 6632 Power Analyzer ; Model 66200 series Digital Power Meter
8. **System Controller** : Industrial PC
9. **Short Circuit / OVP Tester** : Model 6012 / 80612
10. **ON / OFF Controller** : Model 6013 / 80613
11. **AC Source** : Model 6400 / 6500 / 61500 / 61600 / 61700 series
12. **Breaker** : 30A / 60A selectable with emergency stop control
13. **EMI Filter** : 30A
14. **System Power Inlet** : 1Ø 3W / 30A, 60A selectable

* Other devices supported upon request

AC power source

Chroma power supply automatic test system model 8000 supports all Chroma Model 6400, 6500, 61500 ,61600 and 61700 series AC power supplies. They provide stable and clean AC or DC (Model 61500/61600 series) output and power line disturbance simulation for advanced power supply input characteristic testing.



MODEL	6400 Series	6500 Series	61500 Series	61600 Series	61700 Series
Power rating	375-9000VA	1200-9000VA	500-18000VA	500-18000VA	1500-12000VA
Voltage range	0-100V/600V	0-300V	0-300V	0-300V	0-300V
Output phase	1 or 3 phases	1 or 3 phases	1 phases	1 phases	3 phases
DC output	No	No	Yes	Yes	Yes
Output measurement	Yes	Yes	Yes	Yes	Yes
Harmonic measurement	No	No	Yes	No	No
Waveform simulation	No	Yes	Yes	No	Yes
Programmable impedance	No	No	Yes	No	No
Harmonic synthesis	No	Yes	Yes	No	Yes
Inter-harmonic synthesis	No	No	Yes	No	Yes

DC power source

Chroma power supply automatic test system model 8000 supports all Chroma Model 62000P, 62000H series DC power sources which may be used as line-in or OVP sources.



MODEL	62000H Series	62000P Series
Power rating	10kW, 15kW	600,1200,2400,5000W
Voltage range	0-600V/ 1000V	0-100V/ 600V
Programmable current limit	Yes	Yes
Programmable OV point	Yes	Yes
Analog programming	Yes	Yes
Remote sensing	Yes	Yes
Line-drop compensation	10%/4%	5V

Power analyzer / Meter

Chroma power supply automatic test system model 8000 can also support all Chroma Model 6630 , 6632 series Power Analyzer, and Model 66200 Series Digital Power Meter. They do not only provide traditional high precision power measurement, but also the voltage/current harmonics measurements defined in IEC and EN regulation.

MODEL	6630	6632	66201	66202
NO. of input module	1 to 3	1 to 3	1	1
Power measurement range	48 ranges	48 ranges	12 ranges	24 ranges
Voltage measurement range	6 ranges	6 ranges	3 ranges	3 ranges
Current measurement range	8 ranges	8 ranges	4 ranges	8 ranges
Front panel display	Yes	No	Yes	Yes
Front panel editable	Yes	No	Yes	Yes
Harmonics measurement	Yes	Yes	No	Yes
Flicker measurement	Yes	No	No	No
Waveform measurement	Yes	Yes	No	Yes
Build-in regulation limit	Yes	Yes	No	No



DC Electronic Load

Chroma power supply automatic test system model 8000 can support all Chroma Model 6310A, 6330A, 63200, 63600 series DC electronic load. They come with different powers, load modes, slew rates and features. This provides users maximum selection opportunities for different test application requirements.



MODEL	6310A Series	6330A Series	63200 Series	63600
Load mode	CC/ CR/ CV	CC/ CR/ CV	CC/ CR/ CV/ CP	CC/CR/CP/CV/CZ
Power rating	30-1200W	30-1200W	2000-12000W	100-400W
Voltage range	1-500V	1-500V	1-600V	1-600V
Current range	Up to 240A	Up to 240A	Up to 1000A	Up to 80A
Slew rate	Up to 10A/ μ S	Up to 10A/ μ S	Up to 41.6A/ μ S	Up to 8A/ μ S
Measurements	Voltage/Current/Power	Voltage/Current/Power	Voltage/ Current/Power	Voltage/ Current/ /Power
Monitoring output	No	No	Current	Voltage/ Current
Current share measurement	No	No	No	No
Noise measurement	No	No	No	No
Voltage sense input	Yes	Yes	Yes	Yes
Sync Dynamic	No	Yes	Yes	Yes
High Speed	No	Yes	No	Yes

Timing / Noise Analyzer

Chroma power supply automatic test system model 8000 provides an unique timing / noise analyzer, Chroma Model 6011/80611. Its modular design allows users to expand up to 10 input measurement modules. Each module is capable of measuring timing period and noise level. Furthermore, it also provides 16 bits TTL signals and 8 pairs of floating relays for external control. Meanwhile, the 10 multiplexer inputs and 1DMM further extend the Chroma Model 80611 for advanced measurement requirements.

MODEL	6011	80611
NO. of input module	Up to 10	Up to 10
Noise measurement range	2V/ 0.4V	2V/ 0.4V
Low Pass Filter	Up to 20 MHz	Up to 20 MHz
Input circuit	Differential input	Differential input
Timing range	0-64 second	0-64 second
NO. of trigger input	4 sets	6 sets
NO. of comparator	2 / Input module	4 / Input module
Controllable TTL bits	16 Output	16 Output / 16 Input
Controllable floating relay	6	8
NO. of multiplex input	10	10
NO. of multiplex output	2 for DMM & 2 for DSO	1 for DMM



Short Circuit / OVP Tester

Chroma Short circuit / OVP tester provides model 6012 and 80612 versatile tool for OVP/ UVP/ Short circuit. Its unique programmable impedance makes it ideal to simulate OV / UV situation for all types of power supplies.

MODEL	6012	80612
NO. of input terminal	Up to 6	Up to 6
Short circuit impedance	< 0.1 ohm	< 0.05 ohm
Short current measurement	Yes	Yes
Sync. Signal for short circuit	6 relay signal	6 relay signal
OVP/UVP testing	Internal/ External	Internal/ External
Internal impedance range	1K-1M ohm	100-1M ohm
External OVP/UVP source	DC source	DC source
Measurement Capability	By external DMM	Internal
Control Interface	Via Chroma 6011	RS 485



ON/ OFF Controller

Chroma ON / OFF controller Model 6013 and 80613 are used to control AC and DC inputs simultaneously. Meanwhile, it can control AC to turn on and off at any phase angle and measure the input inrush current of the UUT.

MODEL	6013	80613
Input	AC/ DC	AC/ DC
ON/OFF angle - AC	0-360°	0-360°
Voltage range - AC	250V	277V
Current range - AC	30A	30A
Voltage range - DC	200V	200V
Current range - DC	40A	60A
Measurement Capability	By external DMM	Internal
Control Interface	Via Chroma 6011	RS 485



Digital Multi-Meter & Storage Oscilloscope

Chroma power supply auto test system model 8000 is capable to support Chroma12061, Agilent 34401A / 34970A and Keithley 2700 series DMM and most of Tektronix Scopes. Other DMM and DSO are supported upon request.

Selection Guide

Model \ Applications Equipment	PC Power Supply	Server Power Supply	Adapter/Charger	Telecom Power Supply	DC-DC Converter	Industrial Power Supply
AC Source	61500;61600 6400;6500	61500;61600 6400;6500	61500;61600 6400	61500;61600 6400;6500;61700	-	61500;61600 6400;6500
DC Source	62000H; 62000P	62000H; 62000P	62000H; 62000P	62000H; 62000P	62000H; 62000P	62000H; 62000P
Power Analyzer/ Meter	6630;6632 66200	6630;6632 66200	6630;6632 66200	6630;6632 66200	6630;6632 66200	6630;6632 66200
Electronic Load	63600 6310A; 6330A	63600;6310A 63200;6330A	63600 6310A; 6330A	63600; 63200; 6330A	63600;6310A 63200;6330A	63600;6310A 63200;6330A
Timing Noise Analyzer	6011;80611	6011;80611	6011;80611	6011;80611	6011;80611	6011;80611
Short / OVP Tester	6012;80612	6012;80612	6012;80612	6012;80612	6012;80612	6012;80612
ON/OFF Controller	6013;80613	6013;80613	6013;80613	6013;80613	6013;80613	6013;80613
DSO	User Selectable	User Selectable	User Selectable	User Selectable	User Selectable	User Selectable
DMM	-	User Selectable	-	User Selectable	-	User Selectable
Other Instrument	-	-	-	Voice Band/RF Noise Meter	-	-
Other Interface Card	-	I ² C	-	I ² C/CAN BUS/RS-485	-	I ² C/CAN BUS/RS-485

Ordering Information

8000 : Switching Power Supply ATS
6011/80611 : Timing/Noise Analyzer
6011N/ 80611N : Timing/ Noise module
6012/ 80612 : Short Circuit / OVP Tester
6013/ 80613 : ON/ OFF Controller
5004ATM : System Controller
A600011 / A800027 : Test Fixture for Model 8000
A800004 : 19" Rack for Model 8000
A800005 : PCI Bus GPIB Card (National Instrument)
A800010 : 8000 Software Package - Basic version
(Including Test Program Editer,Test Report Editer,Go/NOGO run, Test Report Generator,Hardware Configuration,Management Function)

A800015 : 8000 Software Package
DC Load Module : Refer to Model 6310A, 63200, 6330A, 63600 series
Power Analyzer : Refer to Model 6630, 6632
Digital Power Meter : Refer to Model 66200 series
AC Source : Refer to Model 6400, 6500, 61500, 61600, 61700 series
DC Source : Refer to Model 62000P, 62000H series

Application

DC to DC Converter Testing

Software: Special Design Test Items (Load Fault Power Dissipation Test, Switching Frequency Test, Synchronization Frequency Test)

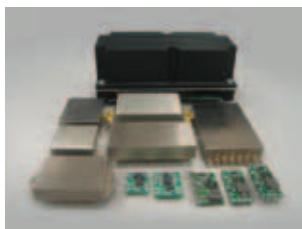
Hardware: Create Standard Test Fixture platform (Receiver)



DC to DC Converter ATS



DC to DC Converter Test Fixture



DC to DC Converter

PV Inverter Test Solution

PV Inverter Testing

The Chroma 8000 ATS is equipped with optimized standard test items for PV inverters (the Unit Under Test). It meets IEEE1547, 1547.1, UL1741, GB/T 19939, CGC/GF004 preliminary test requirements. The user is only required to define the test conditions and specifications for the standard test items to perform the test.



PV Inverter ATS

Electric Vehicle Test Solution

EVSE Testing

It is a customized system based on Chroma 8000 ATS specializing in verification of EV Supply Equipment (EVSE) and complying with SAE-J1772 in programming the test items for operation.

EV OBC & DC-DC Converter Testing

For EV On-Board Charger and DC-DC Converter of different UUT characteristics, integrated connecting panel and exclusive test items including basic electrical characteristics and communication protocol test items are provided to shorten the test time greatly.



EVSE ATS



OBC/DC-DC Converter ATS

Developed and Manufactured by :

CHROMA ATE INC.

致茂電子股份有限公司

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