

DC/DC CONVERTER ATS MODEL 8000

Chroma 8000 Power Supply ATS is excellent for testing various power supplies that includes DC/DC Converter. It provides multiple hardware selections including DC Source, DC Load, Digital Meter, DSO, Timing/Noise Analyzer and Signal Generator, etc. that can be integrated by the software, Power Pro III, on an open platform. Besides a series of prewritten test items, special test items are also created for better testing the DC/DC Converter. As a result the test speed is improved evidently that a full test is applicable as well.

Moreover, an exclusive Test Fixture Receiver is designed to facilitate the test of various production lines in saving time and reducing cost. When there is a need to exchange the production line for test, it can be done easily by replacing the old test fixture from the system and connecting a new one to the Receiver.

Users are able to create new test items using the editing function for any special test requirements on Chroma 8000 ATS and expand the test item database extensively.

PowerPro III also includes powerful report, statistic and management functions, making the system capable to generate various test documents and performing system administration. Because the test and statistical reports are critically important in modern factories for R/D evaluation, QA verification and production tests, these functions are an integral part of the system.

Working under Window98/2000/XP the model 8000 provides test engineers with a dedicated power supply test system in an easy-to-learn Windows environment and allow access to resources provided by Windows.

DC/DC Converter ATS

MODEL 8000

Key Features:

- Special test items for better DC/DC
 Converter use only that improve the test speed significantly
- Special designed Test Fixture Receiver can easily connect different Fixture for test to save the time when switching production line and reduce the production cost
- Special designed Test Fixture that meets the DC/DC Converter's pin assignments of Interpoint™ Company
- Open platform for software
 - Extendable hardware structure
 - Supporting the devices equipped with the GPIB/RS-232 or RS-485/I²C ports
 - Test Item editor
 - Test Program editor
 - Test Report editor
 - Statistics Analysis Report editor
 - On-line control function
 - User level setting
 - Release control
 - Activity log
 - Able to test multiple UUTs of a single unit output concurrently
 - Supporting bar code reader
 - Remote monitoring through LAN or Internet
- Broadly modulated hardware provides highly accurate and stable repetition measurement
- Most cost effective
- Expanding hardware/software as required on Windows 98/2000/XP platform















SPECIAL TEST ITEMS FOR DC/DC CONVERTER

Chroma 8000 ATS not only equips a database of standard test items but also has the test items specially designed for testing DC/DC Converter. As a result the test speed is improved evidently that a full test is applicable as well.

Special test items contain 6 types of DC/DC Converter power supply test requirements. They are OUTPUT PERFORMANCE to inspect the UUT 's output functions, INPUT CHARACTERIESTIC to inspect the power input parameters, REGULATION TESTS to inspect the stability of UUT when inputting power and changing load, TIMING AND TRANSIENT to measure the transient state at power on/off and the time of each event, PROTECTION TESTS to inspect the protective circuit and SPECIAL TESTS to provide commands controlling the device via GPIB, RS-232 and RS-485 ports.

OUTPUT PERFORMANCES

- 1 DC OUTPUT VOLTAGE
- 2. NOISE
- 3. EFFICIENCY
- 4. OVERSHOOT VOLTAGE
- 5. DYNAMIC
- 6. SYNC. DYNAMIC

INPUT CHARACTERIESTICS

- 7. SWITCHING FREQUENCY
- 8. SYNC. FREQUENCY
- 9. INPUT CURRENT
- 10. INPUT CURRENT INITIAL
- 11. INPUT POWER
- 12. VIN RAMP

REGULATION TESTS

- 13 CROSS LOAD REGULATION
- 14. LINE REGULATION
- 15. LOAD REGULATION

TIMING AND TRANSIENT

- 16. TURN ON TIME
- 17. TRANSIENT RESPONSE TIME
- 18. TRANSIENT SPIKE
- 19. LINE TRANSIENT

PROTECTION TESTS

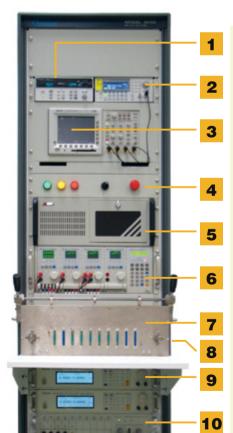
20. SHORT CIRCUIT

21. OC PROTECTION

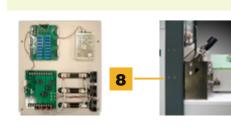
SPECIAL TESTS

22. CONTROL INSTRUMENT VIA GPIB, RS-232, RS-485 INTERFACE READ/WRITE

HIGH PERFORMANCE HARDWARE DEVICES



- 1. Data Acquisition Switch Unit: Agilent -34970A; Other types or brand of Data Acquisition Switch unit supported upon request
- **2. Function / Arbitrary Waveform Generator :** Agilent -33220A; Other types or brand of Function / Arbitrary Waveform Generator supported upon request
- Digital Storage Oscilloscope: TDS-3000/TDS-5000/TDS-7000 series; Other types or brands of DSO supported upon request
- 4. Breaker: 30A / 60A selectable with emergency stop control
- 5. System Controller: Industrial PC
- 6. Electronic Load: Model 63200 / 6330 / 6340 series Electronic Load
- 7. Receiver: Port for connecting test fixture box and test system
- 8. Shunt Board : Provide accurate DC input/output current measurement
- 9. DC Source : Model 6200F /6260 /62120 /62000P Series
- 10. Timing / Noise Analyzer: Model 6011



Other devices support upon request.

DC POWER SOURCE

Chroma power supply automatic test system model 8000 supports all Chroma Model 6200, 6200K, 6200F, 6260, 62120, 62000P series DC power sources which may be used as line-in or OVP sources.



MODEL	6200F Series	6260 Series	62120 Series	62000P Series
Power rating	1200~12000W	6000W	12000W	600~1200W
Voltage range	0~5V/150V	0~10V/600V	0~10V/600V	0~100V/600V
Programmable current limit	Yes	Yes	Yes	Yes
Programmable OV point	Yes	Yes	Yes	Yes
Analog programming	Yes	Yes	Yes	Yes
Remote sensing	Yes	Yes	Yes	Yes
Line-drop compensation	5V	5V	5V	5V

DC ELECTRONIC LOAD

Chroma power supply automatic test system model 8000 can support all Chroma Model 6300, 6310, 6330, 63200 and 6340 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	6330 series	63200 series	6340 series
Load mode	CC/CR/CV	CC/CR/CV/CP	CC
Power rating	30~1200W	2000~12000W	625W
Voltage range	1~500V	1~500V	0.8~50V
Current range	Up to 240A	Up to 600A	Up to 150A
Slew rate	Up to 10A/μS	Up to 25A/µS	Up to 150A/μS
Measurements	Voltage/Current	Voltage/Current/Power	Voltage/Current
Monitoring output	No	Current	Voltage/Current
Current share measurement	No	No	Yes
Noise measurement	No	No	No
Voltage sense input	Yes	Yes	Yes
Sync Signal	Yes	Yes	No
High Speed	Yes	No	No

TIMING / NOISE ANALYZER

Chroma power supply automatic test system model 8000 provides an unique timing / noise analyzer, Chroma Model 6011. 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 6 pairs of floating relays for external control. Meanwhile, the 10 multiplexer inputs and 2 DMM and 2 DSO outputs further extend the Chroma Model 6011 for advanced measurement requirements.



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

DATA ACQUISITION SWITCH UNIT & STORAGE OSCILLOSCOPE

Chroma power supply auto test system model 8000 is capable to support Agilent 34970A Data Acquisition Switch Unit and Agilent 33220A Function / Arbitrary Waveform Generator and most of Tektronix scopes. Other DMM and DSO are supported upon request.

EXCLUSIVE TEST FIXTURE AND RECEIVER

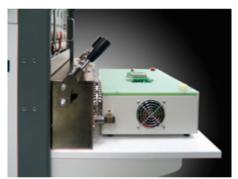
For the test fixture that needs to be changed when testing different UUT, a Receiver has been developed for Chroma 8000 ATS to connect and remove the fixture easily and quickly when switching the production line for test. It reduces a great deal of cost and saves the time for production line exchange. The special designed test fixture meets the DC/DC Converter's pin assignments of Interpoint™ Company.



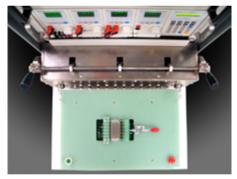
Receiver



Test Fixture



Side View



Top View

ORDERING INFORMATION

8000: Switching Power Supply ATS **6011**: Timing/ Noise Analyzer

6011N/ 80611N : Timing/ Noise module **A800004 :** 19" Rack for Model 8000

A800005: PCI Bus GPIB Card (National Instrument)

DC Source : Refer to Model 6200F, 6260, 62120, 62000P Series **DC Load Module :** Refer to Model 63200, 6330, 6340 Series

Customer designed exclusive test fixture

Receiver Shunt Board

Developed and Manufactured by :

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