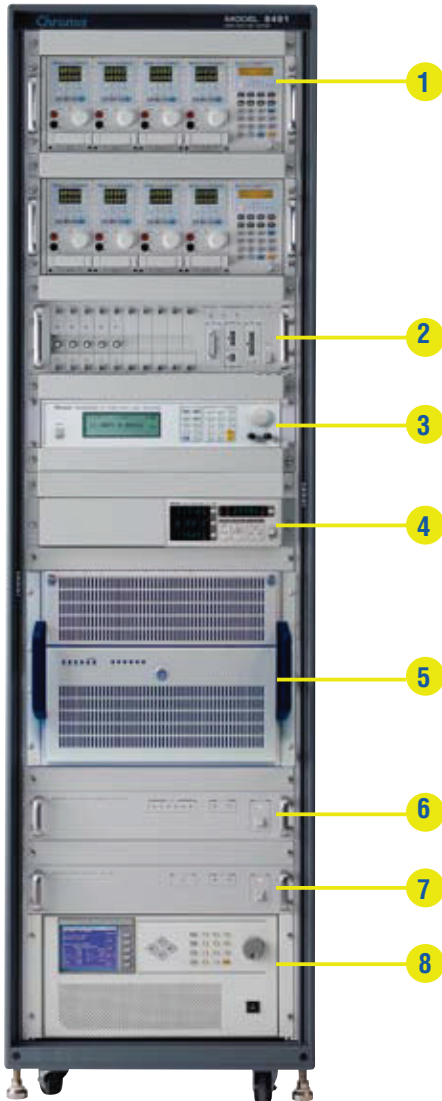


High Performance Hardware Devices and Software Architecture

LED Power Driver Automatic Test Systems

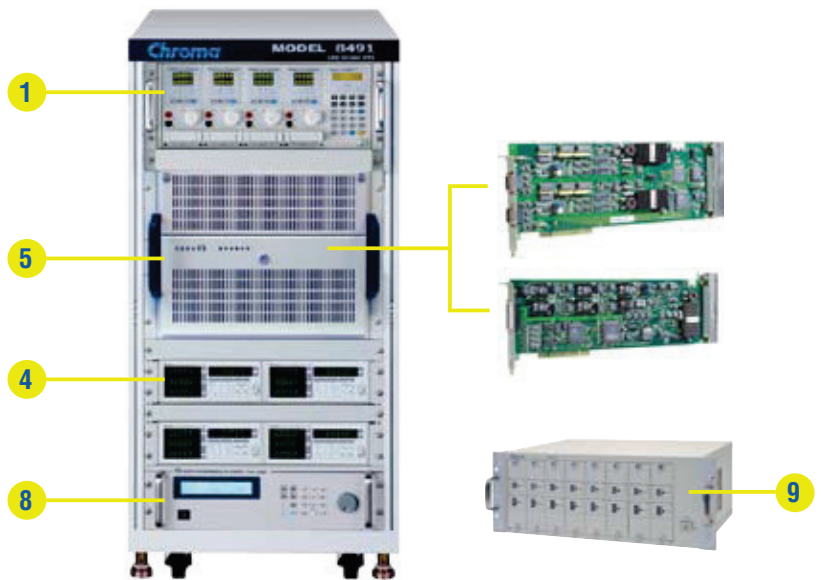
Model 8491



1. **DC Electronic Load** : Chroma 6310A/6330A Series
2. **Time/Noise Analyzer** : Chroma 6011/80611 + 80611N
3. **DC source**: Chroma 62000P Series
4. **Digital Power Meter/Analyzer** : Chroma 6630/66200 Series
5. **Sytem Controller**^{*1} : Industrial PC
6. **OVP/Short circuit tester** : Chroma 6012/80612
7. **ON/OFF Controller** : Chroma 6013/80613
8. **AC Source** : Chroma 6500/61500/61600 Series
9. **Transducer Uint**^{*2} : Chroma A849101

*1 : The controller includes both Measurement Card and Control Card to provide BL control signal (DC level, PWM, SM bus), and Enable ON/OFF signal.

*2 : Requires Measurement Card to measure Dimming Current/ Frequency/ Duty, and Timing / Noise Card to measure Ripple Current (@20MHz)



The 8491 ATS hardware can be customized according to the user (R/D, QC, Production Line) or according to different testing requirements (lighting, TV backlight)

Optimized Test Items

The Chroma 8491 ATS is equipped with optimized standard test items for LED driver testing (lighting & TV backlight). The user is only required to define the test conditions and specifications for the standard test items to perform the test.

The optimized test items cover 6 types of power supply test requirements. OUTPUT PERFORMANCES verify the output characteristics of the UUT. INPUT CHARACTERISTICS check the UUT input parameters. REGULATIONS test the stability of UUT under varying line-in and loading changes. TIMING & TRANSIENT test the timing and transient states during protection. PROTECTION TESTS trigger and test the protection circuit, the SPECIAL TESTS provide means to test the most sophisticated UUT's when unique test routines are needed.

Output Performances

1. Output voltage
2. Output current
3. Ripple Current (RMS & p-p)
4. Dimming Current
5. Dimming Frequency
6. Dimming Duty
7. Efficiency
8. In-test adjustment

Input Characteristics

9. Input Inrush Current
10. Input RMS Current
11. Input Peak Current
12. Input Power
13. Current Harmonics
14. Input Power Factor
15. Input Voltage Ramp
16. Input Freq. Ramp
17. AC Cycle Drop Out
18. PLD Simulation

Regulation Tests

19. Current Regulation
20. Voltage Regulation
21. Total Regulation

Timing & Transient

22. Turn ON Time
23. Hold Up Time

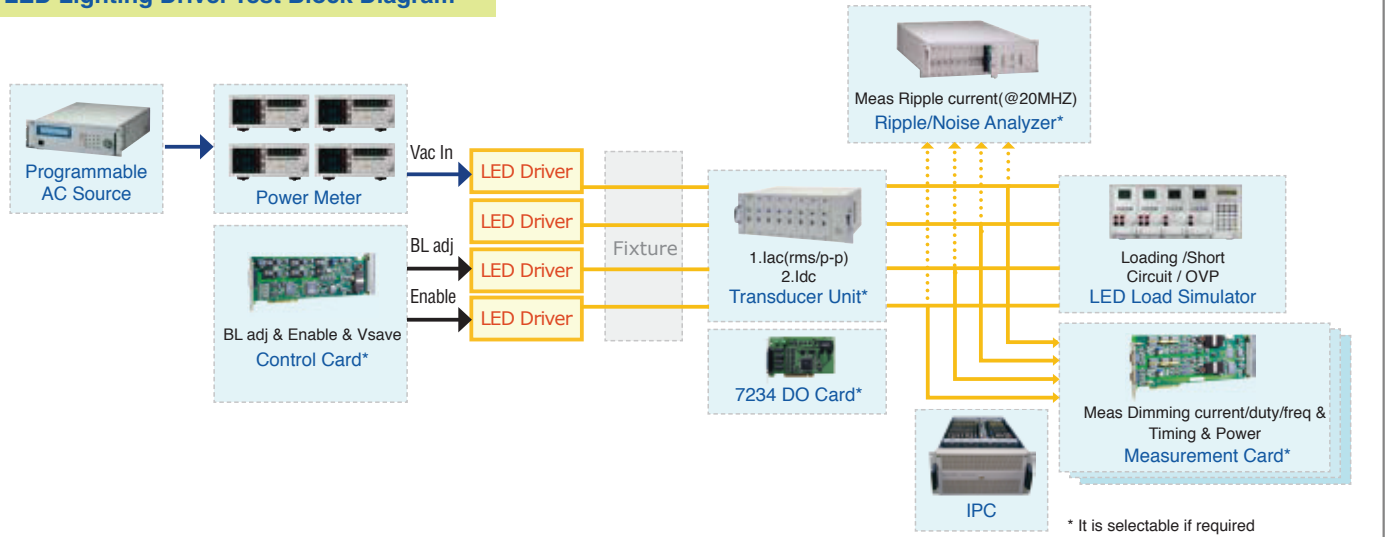
Protection Tests

24. Short Circuit
25. OV Protection
26. OL Protection
27. OP Protection

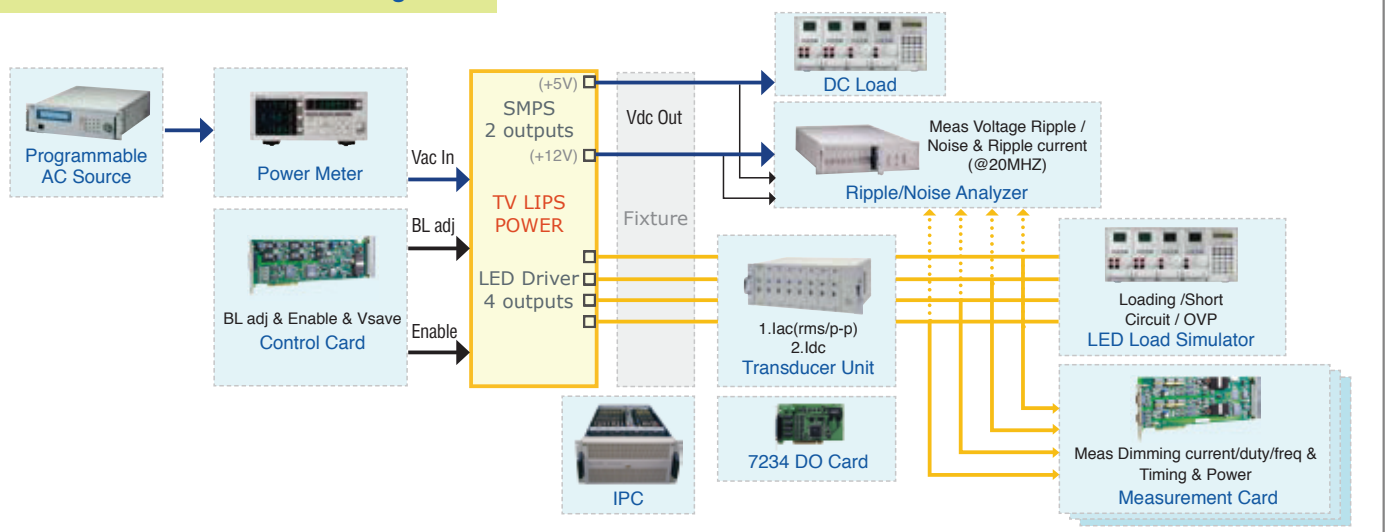
Special Tests

28. GPIB Read/Write
29. RS232 Read/Write

LED Lighting Driver Test Block Diagram



LED TV LIPS Power Test Block Diagram



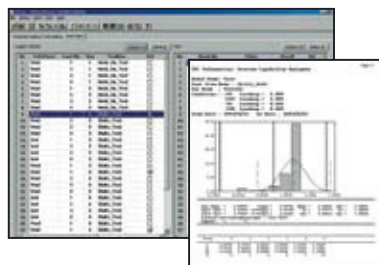
Software Platform of ATS

The Model 8491 Test Systems include the industries most sophisticated power supply testing software platform, PowerPro III. PowerPro III provides users with an open software architecture suited for a wide range of applications and devices.

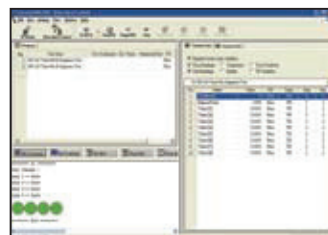
Power Pro III is a Windows 98/NT/2000/XP environment, which provides necessary computer peripherals.



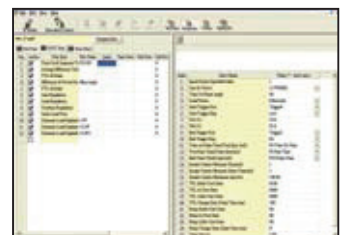
Software Main Screen



Statistical Report



Running GO/NOGO



Test Program Editing

Ordering Information

Programmable AC sources

- 61501 : Programmable AC Source 0~300V, 15~1kHz / 500VA, 1φ
- 61502 : Programmable AC Source 0~300V, 15~1kHz / 1KVA, 1φ
- 61503 : Programmable AC Source 0~300V, 15~1kHz / 1.5KVA, 1φ
- 61504 : Programmable AC Source 0~300V, 15~1kHz / 2KVA, 1φ
- 61505 : Programmable AC Source 0~300V, 15~1kHz / 4KVA, 1φ
- A615001 : Remote Interface Board for Model 61501~61505 Series (External V Input, RS-232 Interface, GPIB Interface)

Digital Power Meters

- 66201 : Digital Power Meter
- 66202 : Digital Power Meter

A662002 : GPIB+USB Remote Interface Board

A662003 : Measurement Test Fixture (250V/15A)

Programmable DC Electronic Loads

- 6312A : Mainframe for 2 Load Modules
- 6314A : Mainframe for 4 Load Modules
- 63110A : Load Module 2A/300V/100Wx2 channels
- A631000 : GPIB & USB Interface for Model 6314A/6312A Mainframe

LED Power Driver Automatic Test Systems

8491: LED Power Driver ATS