

POWER/LOAD TEST SOLUTIONS

- DC/DC POWER MODULE TEST
- AC/DC POWER MODULE TEST
- UPS POWER TEST
- POWER/LOAD TEST SYSTEM



HIGH EFFICIENCY & HIGH PRECISION & HIGH STABILITY

Power Supply/ Electronic Load Auto-Testing Solution



Power supplies and electronic loads are an important part of the automatic test equipment (ATE) system. With many years of technical background and production experience, APM has a rich product line of power supplies, electronic loads and self-made boards. The system is compatible with power analyzers, digital oscilloscopes, multimeters, etc. of different brands or models in the industry, and builds a complete set of test solutions. It adopts a hardware modular built-in frame structure and can be adjusted according to customers' actual test requirements and budget. It is suitable for testing all kinds of AC and DC power supplies, chargers, communication power supplies, photovoltaic inverters, LED drive sources, on-board chargers, charging piles and other related products.

DC/DC Power Module Test

DC/DC conversion module is a common power converter, which can realize the conversion of high/low direct current. After conversion, it can output a single channel or multiple channels of different specifications. The functional verification of the DC/DC conversion module is very important, and the traditional manual inspection, both in terms of efficiency and accuracy, has been unable to meet the current growing market demand.



Recommendation

SP-1U /2U Series High Performance Programmable DC Power Supply

Voltage Range: 20V-800V

Current Range: 7.5A-200A

Power Range : 600W-4000W, Expandable to 40kW

EL Series High-density Programmable DC Electronic Load

Voltage Range: 200V/600V/1200V

Current Range: 60A-720A

Power Range : 600W-6600W

AT-T2000 Series Switching Power Supply Test System

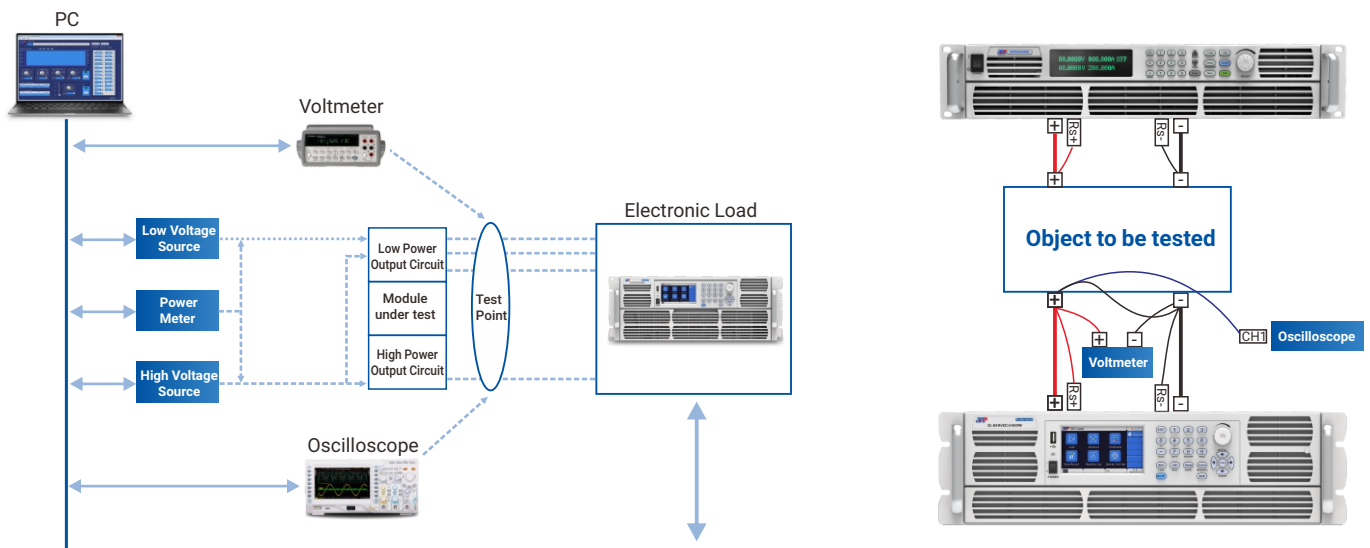
Application Range:

Electric vehicle, aviation, military, industrial automation, LED lighting, communications, information, and medical industries.

Application Advantages:

- Optimized standard test items for various power products, easy to learn.
- Open hardware platform, test equipment can be increased or decreased according to customer needs.
- Open software platform, modular software architecture design, users can expand test items.
- Manage multiple accounts with different permissions to avoid unauthorized modification.
- Barcode scanning automatically calls up the program, and supports single-channel or multi-channel simultaneous online testing.
- Adding judgment conditions, can automatically pop up the graphical operation interface.

System Structure:



AC/DC Power Module Test



Recommendation

SP-300 Series Single-phase Programmable AC Power Supply

Power Range: 600VA/1000VA/1500VA/2000VA/3000VA/4000VA/5000VA

SPST Series Linked 3-Phase AC Power Supply System

Power Range: 1800VA/3000VA/4500VA/6000VA/9000VA/12000VA/15000VA

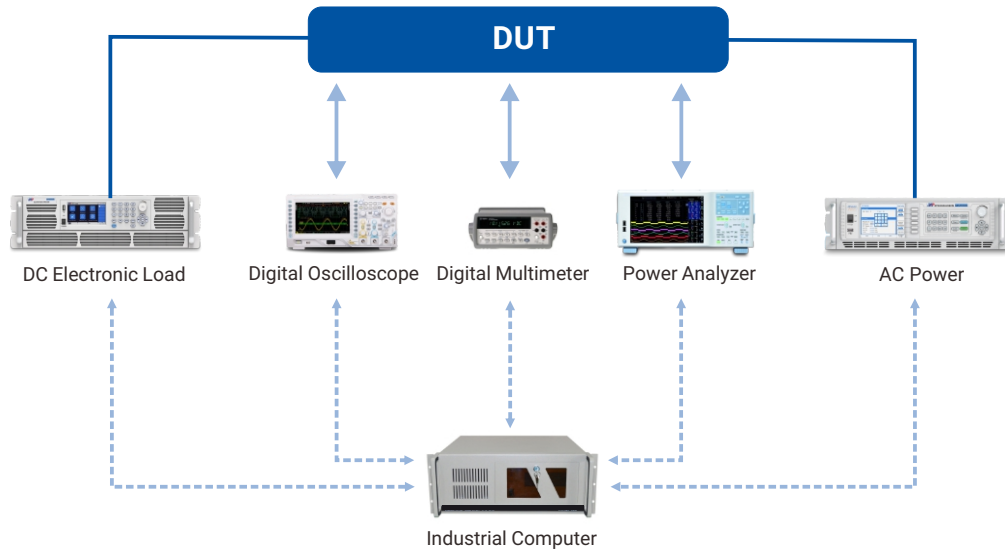
Application Range:

Power Adapters, On-board Chargers, R&D Labs, Universities and Certification Labs.

Application Advantages:

- Provide a variety of waveform editing modes to simulate various power disturbance conditions and regulatory certification items, such as periodic power outages, sags, instantaneous spikes or more complex waveform output.
- Built-in power meter function, can realize real-time measurement of 15 electrical parameters and up to 40 harmonic components.

System Structure:



UPS Power Test



Application Range:

Industrial automation field, such as UPS aging test.

EL Series High-density Programmable DC Electronic Load

Voltage Range: 200V/600V/1200V
Current Range: 60A-2880A
Power Range : 600W-264000W

Application Advantages:

- Support the V-monitor/ I-Monitor monitoring function
- Can automatically perform OCP/OPP function test.
- Support SCPI communication protocol, standard rack size design, convenient system integration.
- The on-load voltage and current are controlled by the external analog input. The external input signal 0~10V corresponds to the load 0~full load condition; the input voltage controlled by the external analog can realize the on-load of arbitrary waveform conditions, in line with industrial control requirements.

Power/Load Test System

The APM power supply/load automatic test system adopts hardware modular embedded frame structure, which is based on APM abundant power supply, load and self-made board product line. It provides flexibility and scalability to the system architecture, customer can adjust according to the budget. At the same time, the system is compatible with different brands or models of power analyzers, digital oscilloscopes, multimeter, etc.

Medium/Low Power DC Power Test System:



The test system is suitable for the medium/low power DC power supply test.
 Test capacity: voltage 0~800VDC, current 0~200A, 0~4000W, expandable;
 In addition to the test items that implement the above standards, customized function expansion can be realized according to customer needs.

Medium/low power AC power supply test system:



This test system is suitable for the medium/low power AC power supply test.
 Test capacity: voltage 0~300VDC, current 0~46A, 0~5000W, expandable;
 In addition to the test items that implement the above standards, customized function expansion can be realized according to customer needs.

High-power DC power supply test system:



The test system is suitable for the high-power DC power supply test.
 Test capacity: voltage 0~2250VDC, current 0~3000A, 0~300kW, expandable;
 In addition to the test items that implement the above standards, customized function expansion can be realized according to customer needs.

DC Electronic Load test system:



The test system is suitable for DC Electronic Load.

Test capacity: voltage 0~1200VDC, current 0~3000A, 0~300kW, expandable; In addition to the test items that implement the above standards, customized function expansion can be realized according to customer needs.

Application Advantages:

- Graphical interface, easy to learn.
- Standard test items, flexible expansion.
- Modular design for easy maintenance.
- High measurement accuracy and stable system operation.
- Support single-channel or multi-channel parallel testing.
- Multi-level management authority setting function.
- User permission setting function
- An open software editing platform for users to write and modify test programs.

Testing Items:

Product information

- SN/MAC information input
- Product information comparison

Stability Test

- Line regulation test
- Load regulation test

Protection characteristic test

- Short circuit protection test
- Over voltage protection test
- Over load protection test
- Over power protection test

Input characteristic test

- Input current RMS test
- Input power factor test
- Input power disturbance test
- Input frequency fluctuation test
- Input power test

Control characteristic test

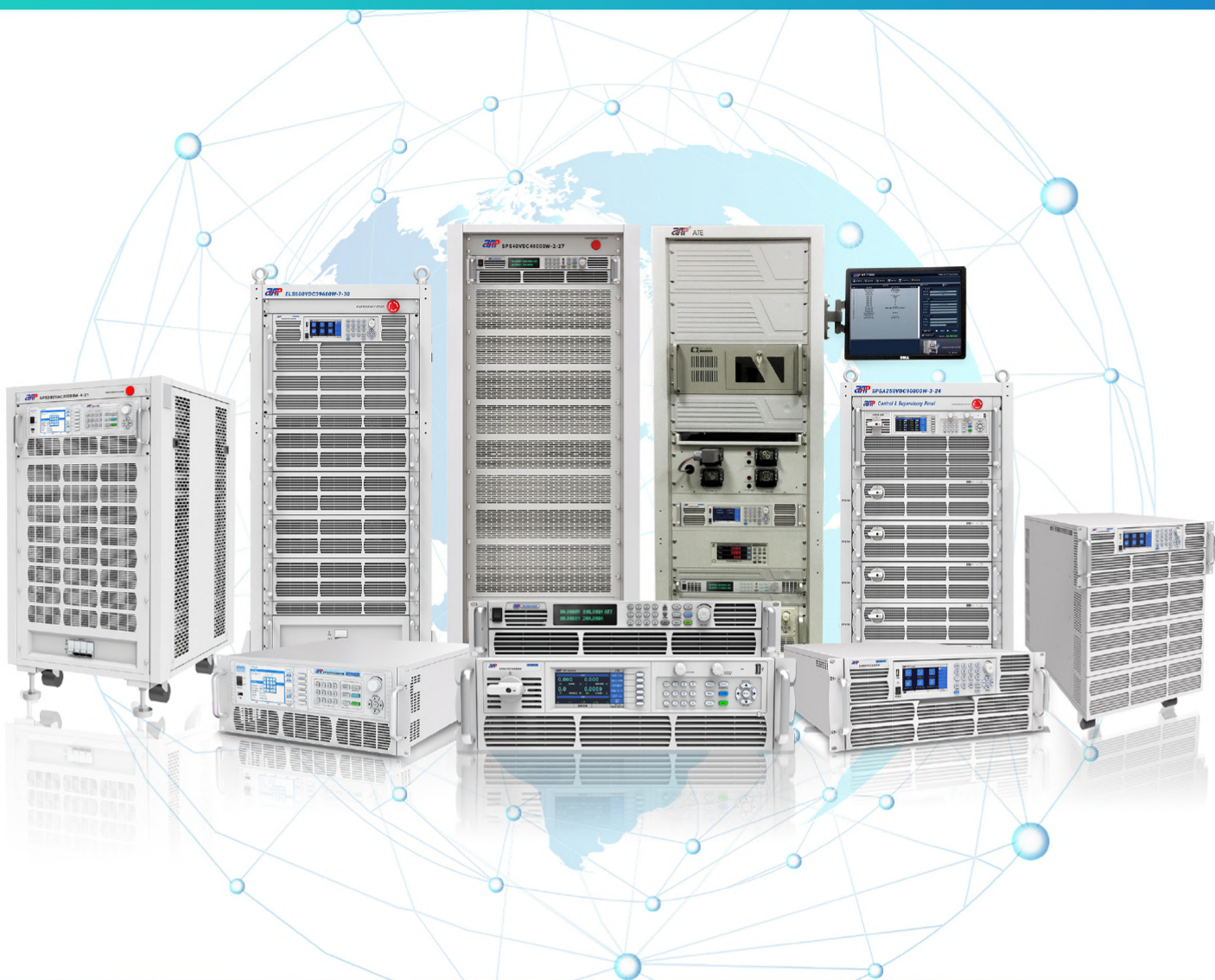
- RS232 read and write
- RS485 read and write
- USB read and write
- LAN read and write
- GPIB read and write

Timing and Transient Characteristics

- Startup time test
- Rise time test
- Shutdown time test
- Fall time test

Output characteristic test

- Output voltage/current/power accuracy test
- Output voltage ripple test
- Output efficiency test
- Dynamic mode test



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