

3720A/3721A

High Reliability

- Protective circuitry provides over-current, over-voltage, over-power, over-temperature and reverse polarity protection to ensure the protection of the electronic load;
- A high-speed, power limiting circuit can limit input power rapidly when it is overloaded, thus there is no need to interrupt testing. Equipment adaptability to complicated operational environments is thereby greatly enhanced.
- A high-efficiency, intelligent cooling system can effectively reduce system temperature and enhance power density;
- The input binding posts with their innovative design are especially suitable for large current testing. They are easy to operate, reliable and durable;
- The specially ruggedized case with its rubber bumpers protects the load thus effectively prolonging the unit's service life.

Great Performance

- Circuit improvement greatly enhances the dynamic response of CR mode and widens the application scope of that mode;
- The innovative CPV and CPC modes can be applied to testing voltage/current source with constant power respectively, and both modes can effectively prevent short circuit when the set power level of the load exceeds the output power of the power supply;
- Minimum operating voltage is less than 0.6V at the load's full rated current. With optional low-voltage testing devices, the maximum current can be achieved even though the input voltage is 0V. This is especially suitable for fuel cell, solar cell and other new energy test applications;
- By adopting the optimum algorithm and high-speed hardware circuitry, the D/A conversion rate can reach up to 100kHz. The overall smoothness of slope control has been raised, meanwhile, the timing precision and resolution of transient test and sequential test have also been improved;



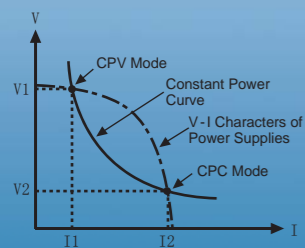
- The 24 bit A/D and 17 bit D/A converters incorporated, provide this equipment with greatly enhanced setting and measurement resolution.

Multifunction

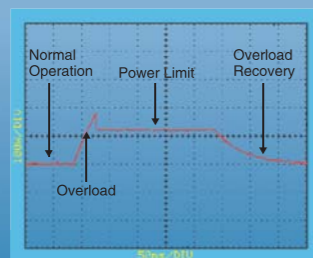
- Equipped with four basic test modes: CC, CV, CR, CP;
- High-speed transient operation with separate high/low level time and rising/falling time control;
- Powerful sequential test function; with a minimum step time of 10us; and a maximum step time of 100000s. Cyclic numbers can be adjusted freely and a sequence can be chained to another sequence to achieve even more complex test procedures;
- Providing short-circuit test, battery discharge test and other auxiliary functions;
- Remote sense input terminals and trigger input terminal are provided. The remote measurement can monitor the input signal automatically, and it is not necessary to change wiring or modify settings during operation;
- 10 groups of setup parameters can be saved, and the preset parameters saved in location 0 can be recalled automatically at power-on;
- By supporting SCPI, it is easy to build an ATE(automatic test equipment) system that works with other programmable instruments via optional RS232, USB and GPIB interfaces.

Easy Operation

- Design optimized for portability and rugged reliability;
- Logical keypad design and convenient test operation;
- Easy-to-set test parameters coupled with a powerful sequence editing function;
- All electronic calibration - therefore no need to dismantle the equipment-chassis;
- Firmware can be updated online.



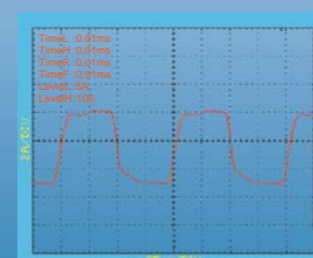
CPV Mode and CPC Mode



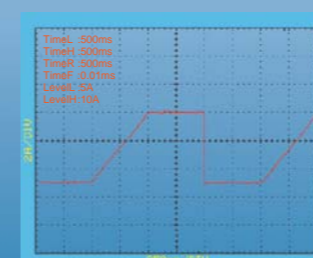
Power Limit Process



Turn on Characters (10V,10A)



10kHz Transient Operation
(Input Voltage: 5V)



Low Speed Transient Operation
(Input Voltage: 5V)

