# Data Sheet

## UDP6700 Series DC Power Supply

# Main Features

- Fully digital control

- Full scale high resolution:10 mV/1mA

- Low ripple and noise

- Software correction function

- Minimum overall dimension

- TFT LCD display

- Remote compensation

- Support RS232 communication

- Fan intelligent regulation

- Constant voltage and constant current output

- High reliability: overvoltage / overcurrent / overtemperature protection function

- List & delayer function

- The output is controlled by a switch

- High quality and high cost performance

- Multiple groups of output voltage / current can be preset: 3 × 200 groups

# DC Power Supply Panel



Ⓐ LCD display　　Ⓑ Store shortcuts　　Ⓒ Voltage setting key　　Ⓓ Current setting key

Ⓔ Menu key　　Ⓕ Keyboard lock　　Ⓖ Output key　　Ⓗ Rotary encoder

Ⓘ Shift right key　　Ⓙ Shift left key　　Ⓚ Return key　　Ⓛ Confirm key　　Ⓜ Power switch

Ⓝ Positive output terminal　　Ⓞ Negative output terminal　　Ⓟ GND terminal

Ⓠ Output status indicator　　Ⓡ Remote compensation terminal

Ⓢ Input source selection terminal　　Ⓣ AC socket　　Ⓤ Fuse slot　　Ⓥ RS232

Ⓦ Fan　　Ⓧ Protected GND

# Product Introduction

UDP6700 series switching DC power supply has a wide range of voltage and current utilization, leading the same type of power supply. The power ratio reaches 3.0. One machine can replace multiple small power supplies to reduce your repeated investment. It is equipped with RS232 communication interface as standard and supports SCPI protocol to facilitate remote control. It has the functions of list and delayer. The remote compensation module can avoid the inaccurate test caused by the voltage drop on the load line. HD LCD display brings better experience to measurement and debugging.

## Wide range output

series is a wide range and high efficiency DC power supply with an output power ratio of 3.0. The output range is a wide range surrounded by the maximum voltage, maximum current and maximum power. One power supply can replace multiple small power supplies, saving the purchase cost.
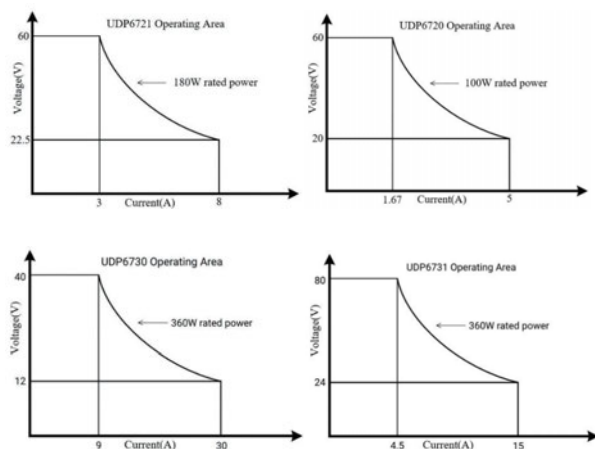


## Remote compensation

The UDP6700 series provides remote compensation terminals. Connect S + S - to the load end to realize remote compensation. At this time, the voltage value echoed by UDP6700 is the remote load voltage value. Reduce the impact of long-distance wires on voltage.
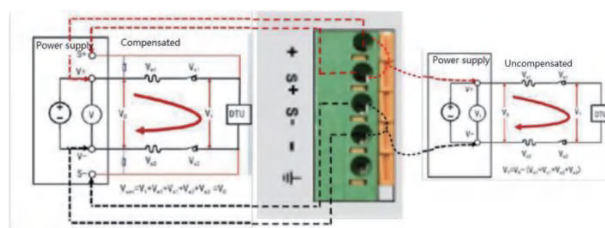


## LCD full color display

UDP6700 series adopts 2.8inch full-color LCD display to show users more display contents without repeated reading and recording. It also provides interaction of multiple parameters, which can be set according to your needs.
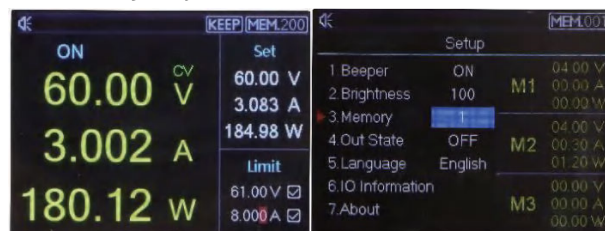


## Remote control

This series of power supply provides RS232 serial interface and supports SCPI protocol. It is equipped with upper computer software, which can set, view and carry out statistical work on PC. The chart on the right records the change trend of data during use. Help you with data analysis.
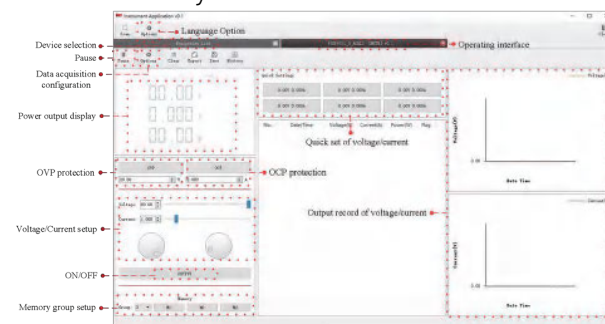


## Protection function

Long press "V" and "A" to start OVP and OCP settings. After enabling the protection function, when the power output reaches the protection value, an alarm will be triggered and the output will be closed to protect the equipment. The instrument is equipped with

intelligent adjustable fan, and OTP protection will be started when the instrument temperature is too high.
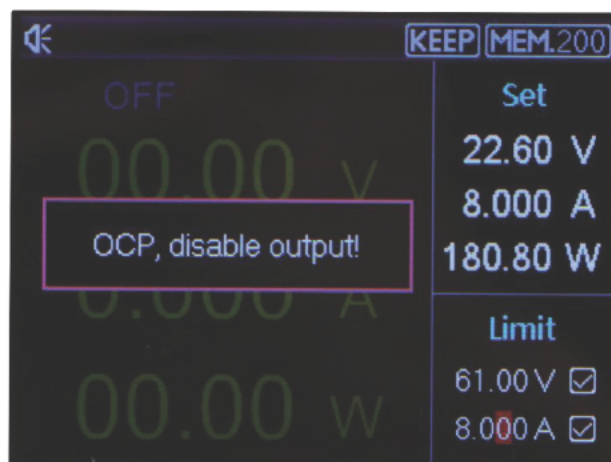


### List & delayer function

UDP6700 series power supply has list and delayer functions. Provides 48 sets of editable points. Users can customize the output list to realize automatic measurement. You can also edit the delayer function to realize the power delay and on-off operation. These two functions will bring you automation convenience.
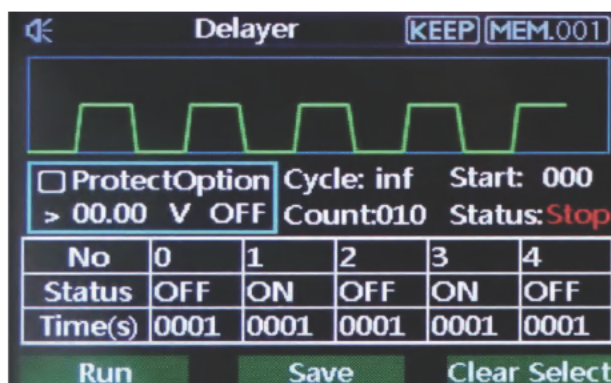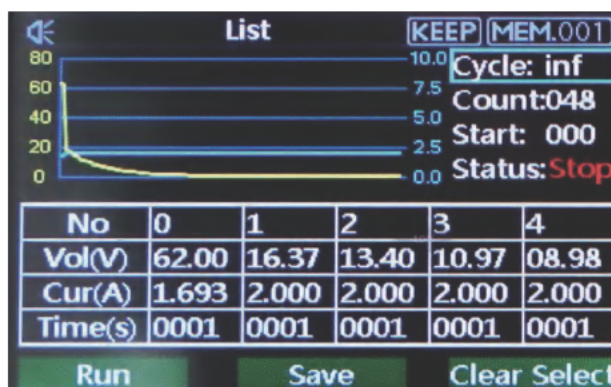




### Save 600 groups of settings

UDP6700 series provides 200 groups of M1, M2 and M3, with a total of 600 preset groups. You can store your diverse needs and improve setup efficiency.
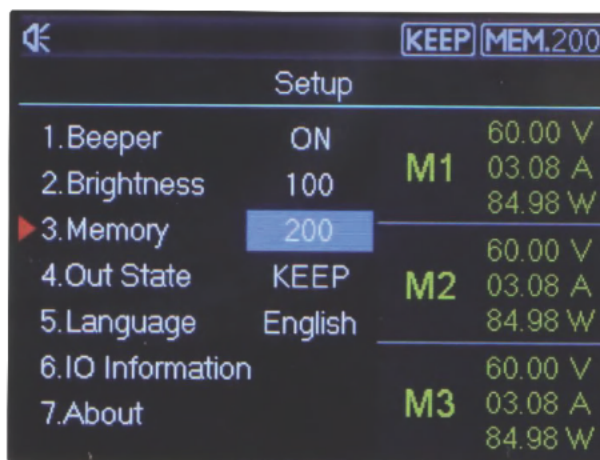
# Technical Specification

| Model | | UDP6720 | UDP6721 | UDP6730 | UDP6731 |
|---|---|---|---|---|---|
| Channel | Channel | 1 | 1 | 1 | 1 |
| Output Rating | Voltage | 0~60V | 0~60V | 0~40V | 0~80V |
| | Current | 0~5A | 0~8A | 0~30A | 0~15A |
| | Power | 100W | 180W | 360W | 360W |
| Load Regulation | Voltage | <0.01%+3mV | <0.01%+5mV | <0.03%+30mV | <0.03%+30mV |
| | Current | <0.01%+3mA | <0.01%+5mA | <0.03%+30mA | <0.03%+15mA |
| Line Regulation | Voltage | <0.01%+3mV | <0.01%+5mV | <0.03%+15mV | <0.03%+30mV |
| | Current | <0.1%+3mA | <0.1%+5mA | <0.1%+15mA | <0.1%+10mA |
| Programming Accuracy | Voltage | <0.05%+10mV | <0.05%+10mV | <0.1%+10mV | <0.1%+10mV |
| | Current | <0.2%+2mA | <0.3%+5mA | <0.3%+30mA | <0.3%+10mA |
| Read back Accuracy | Voltage | <0.05%+10mV | <0.05%+10mV | <0.1%+10mV | <0.1%+10mV |
| | Current | <0.1%+2mA | <0.3%+5mA | <0.3%+30mA | <0.3%+10mA |
| Ripple and Noise | Voltage | <2.0mVrms | <5.0mVrms | <12mVrms | <12mVrms |
| | Current | <5.0mArms | <8.0mArms | <72mArms | <27mArms |
| Set resolution | Voltage | 10mV | 10mV | 10mV | 10mV |
| | Current | 1mA | 1mA | 1mA | 1mA |
| Readback resolution | Voltage | 10mV | 10mV | 10mV | 10mV |
| | Current | 1mA | 1mA | 10mA | 10mA |
| Temperature coefficient | Voltage | ≤100ppm/℃ | ≤100ppm/℃ | ≤300ppm/℃ | ≤300ppm/℃ |
| | Current | ≤200ppm/℃ | ≤200ppm/℃ | ≤300ppm/℃ | ≤300ppm/℃ |
| Display | Display | 2.8-inch LCD, 4-digit display | 2.8-inch LCD, 4-digit display | 2.8-inch LCD, 4-digit display | 2.8-inch LCD, 4-digit display |
| Dimension | W*H*D | 87*174*255 (mm) | 87*174*255 (mm) | 87*174*255 mm) | 87*174*255(mm) |
| Weight | Net | <2.5kg | <2.5kg | <2.5kg | <2.5kg |
| Interface | Interface | RS232, Remote compensation | RS232, Remote compensation | RS232, Remote compensation | RS232, Remote compensation |
| Input | Voltage | AC:110(±10%)V/220(±10%)V | AC:110(±10%)V/220(±10%)V | AC:110(±10%)V/220(±10%)V | AC:110(±10%)V/220(±10%)V |
| | Frequency | 50Hz/60Hz | 50Hz/60Hz | 50Hz/60Hz | 50Hz/60Hz |
| Environment | Operating temperature | 0℃~45℃ | 0℃~45℃ | 0℃~40℃ | 0℃~40℃ |
| | Operating humidity | 20%~80% (Non condensing) | 20%~80% (Non condensing) | 20%~80% (Non condensing) | 20%~80% (Non condensing) |
| | Storage | -20℃~70℃ | -20℃~70℃ | -20℃~70℃ | -20℃~70℃ |
| | Altitude | ≤2000m | ≤2000m | ≤2000m | ≤2000m |
| | Pollution degree | 2 | 2 | 2 | 2 |

CE  RoHS  UKCA

*The UDP6700 series have been certified by CE, UKCA

# Order information

| Model | Description | Standard Quantity per Carton | Order No. |
|---|---|---|---|
| Model | UDP6720(1CH, 60V,5A,100W, RS232) | 1 | UDP6720 |
| | UDP6721(1CH, 60V,8A,180W, RS232) | 1 | UDP6721 |
| | UDP6730(1CH, 40V,30A,360W, RS232) | 1 | UDP6730 |
| | UDP6731(1CH, 80V,15A,360W, RS232) | 1 | UDP6731 |
| Standard accessories | Power cord that conforms to the standard of the destination country | 1 | — |
| Optional accessories | Alligator clip test lead | 1 | — |

# Warranty

Three-years warranty, excluding probes and accessories.

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