

# HDP135V6 DC Power Supply User Manual

## I. Product Introduction

HDP135V6 power supply is a high quality, cost-effective DC power supply. It has four-digit LED voltage and current display. It also has over voltage protection (OVP), over current protection (OCP), over temperature protection (OTP) and USB quick charging functions.

## II. Product Model

Model	CH	Output V/A	LCD digits	RS232	AC input
HDP135V6	1	35.2V/6.2A	4	None	115/230VAC
HDP135V6A	1	35.2V/6.2A	4	None	230VAC
HDP135V6B	1	35.2V/6.2A	4	None	115VAC
HDP135V6S	1	35.2V/6.2A	4	Yes	115/230VAC

## III. Performance Specifications

### 1 Rated Working Condition

AC input: 115 VAC  $\pm$  10%, 230 VAC  $\pm$  10%, 50/60Hz

Working Conditions: Temperature -10°C ~ 40°C

Relative humidity  $\leq$  80%

Storage Conditions: Temperature -20°C ~ 60°C

Relative humidity  $\leq$  80%

### 2 Specifications

All technical specifications can only be guaranteed when the instrument is operated continuously for more than 30 minutes at the specified operating temperature (18°C to 28°C).

Voltage	
Load Regulation	$\leq 0.1\% + 5\text{mV}$
Line Regulation	$\leq 0.01\% + 5\text{mV}$
Set Resolution	10mV
Set Accuracy	$\leq 0.1\% + 1 \text{ digits}$
Readback Resolution	10mV
Readback Accuracy	$\leq 0.1\% + 1 \text{ digits}$
Ripple	10mVrms
Current	
Load Regulation	$\leq 0.2\% + 3\text{mA}$
Line Regulation	$\leq 0.2\% + 3\text{mA}$
Set Resolution	1mA
Set Accuracy	$\leq 0.2\% + 3\text{mA}$
Readback Resolution	1mA
Readback Accuracy	$\leq 0.2\% + 3 \text{ digits}$
Ripple	5mArms
OVP	0 ~ 35.2V $\pm$ 0.2%FS
Maximum Voltage	35.2V $\pm$ 0.2%
OCP	0 ~ 6.2A $\pm$ 0.2%FS
Maximum Current	6.2A $\pm$ 0.2%

Quick Charge	
Output Voltage Range	5V ~ 12V
Output Power	Maximum: 18W
Supported Quick Charging Protocol	DCP (Apple, Samsung and BC1.2), Qualcomm QC2.0/QC3.0, Huawei Quick Charge Protocol FCP, Samsung Quick Charge Protocol AFC
General Features	
Remote Interface	RS232 (Optional) Baud rate: 2400 Data bit: 8 Stop bit: 1 No parity check
AC Input	115 VAC $\pm$ 10%, 230 VAC $\pm$ 10%, 50/60Hz
Working Conditions	Temperature -10 °C to 40 °C Relative Humidity $\leq$ 80%
Storage Conditions	Temperature -20 °C to 60 °C Relative Humidity $\leq$ 80%
Cooling	Air cooling
Weight	2.2 Kg
Size	85 * 150 * 230 (mm)

## IV. Front Panel



### 1 Voltage Display

### 2 Current Display

### 3 Save and Recall Keys M1 ~ M10

M1 ~ M4: Press **[M\*]** once, and the indicator lights up to display the group settings. Use the voltage and current adjustment knobs to adjust the settings that need to be saved, and then long press the **[M\*]** key until the indicator lights up, the settings will be saved in the **[M\*]** position.

M5 ~ M10: To use M5 ~ M10 to save and recall, use it in conjunction with the **[Shift]** key. Taking M5 as an example, press the **[Shift]** key and the **[Shift]**

indicator will light up. Press the **[M1]** key below **M5** once again and the **[M1]** indicator will light up to display the group settings of **M5**. Use the voltage and current adjustment knob to adjust the settings that need to be saved. Press the **[Shift]** key and the **[Shift]** indicator will light up. Then long press the **[M1]** key below **M5** until the **[M1]** indicator lights up and the settings will be saved in the **M5** position.

#### 4 Shift Key

Some keys provide texts above them. This indicates that the key has a function that you can access by pressing and releasing the **[Shift]** key before pressing this key. For example, if you press and release **[Shift]** before pressing **[M1]**, you will access **M5** function:



#### 5 ON/OFF: Enables or disables output.

#### 6 Output Terminal

Positive output terminal (red): Connect to the positive terminal of the load.

Negative output terminal (black): Connect to the negative terminal of the load.

Ground terminal (green): Connect to the chassis or ground cable (ground terminal of power cable).

#### 7 USB Quick Charge Port

The output voltage of USB quick charge ranges from 5V to 12V, providing a maximum output power of 18 W. The USB quick charge automatically adjusts the output voltage and current according to the identified quick charge protocol. Typical output voltages and currents are 5V@3.4A, 9V@2.0A, and 12V@1.5A. When charging an electronic device that does not have quick charging function, charging will be provided at standard 5V.

USB quick charge provides input overvoltage and undervoltage protection, output overcurrent, overvoltage, undervoltage, short circuit protection and other functions.

The quick charge indicator lights up when the quick charge request voltage is not 5V, that is, it lights up when the request voltage is higher or lower than 5V.

**8 Keyboard Lock:** Press the key, the indicator will light up, and except this key and **[ON/OFF]** key, all keys and knobs are disabled. Press the key again and all keys and knobs are restored to use.

#### 9 Current Adjustment Knob

Press down the knob to enter the setting mode with

the digit flashing. Press the knob several times in succession to change the flashing digit. Turn the knob clockwise to increase the value, and turn the knob counterclockwise to decrease the value.

#### 10 OCP (Over Current Protection)

Press the **[OCP]** key to turn on the OCP function, and the indicator will be on. Press the **[OCP]** key again to turn off the OCP function, and the indicator will be off. Long press the **[OCP]** key to enter the setting mode and use the current adjustment knob to change the OCP setting value. When the actual output current is higher than the OCP setting value, the protection function is triggered, the screen displays "**EC OCP**", and the output is forcibly turned off. However, the **[ON/OFF]** indicator is not turned off, you can press the **[ON/OFF]** key to clear the error and turn off the indicator.

**11 Voltage Adjustment Knob:** The same as the current adjustment knob.

#### 12 OVP (Over Voltage Protection)

Press the **[OVP]** key to turn on the OVP function, and the indicator light will be on. Press the **[OVP]** key again to turn off the OVP function, and the indicator light will be off. Long press the **[OVP]** key to enter the setting mode and use the voltage adjustment knob to change the OVP setting value. When the actual output voltage is higher than the OVP setting value, the protection function is triggered, the screen displays "**EC OVP**", and the output is forcibly turned off, but the **[ON/OFF]** indicator is not turned off. Press the **[ON/OFF]** key to clear the error and turn off the indicator.

**13 CC (Constant Current Output):** In the constant current output state, the CC indicator light is on.

**14 Keyboard Lock Sign:** Press the **Keyboard Lock** key, the light will be on. In keyboard lock mode, except **Keyboard Lock** key and **[ON/OFF]** key, all keys and knobs are disabled. Press **Keyboard Lock** key again and all keys and knobs are restored to use.

**15 CV (Constant Voltage Output):** In the constant voltage output state, the CV indicator light is on.

### V. Rear Panel



## VI. Safety Instructions

### 1 Check the AC Voltage Gear

The HDP135V6 power supply supports two specifications of AC power inputs (115VAC or 230VAC). Before use, the user should check the gear of the AC voltage selector on the rear panel of the power supply, and the input voltage should be within the range allowed by the gear ( $\pm 10\%$ ).

### 2 Check the Fuse

The instrument has been installed with fuse of specified specification at delivery. Before use, please check whether the fuse model matches the AC voltage gear. If the fuse does not match or is blown, replace the fuse according to the specification.

Procedure for replacing a fuse:

1. Turn off the power supply and remove the power cable.
2. Take out the fuse holder.



3. Remove the fuse and install a new one.
4. Take the fuse holder back into the slot.

### 3 Connect the AC Power Supply

Use the power cable provided in the accessories to connect the instrument to the properly grounded AC power supply.

To avoid electric shock, please make sure that the instrument is properly grounded.

### 4 Startup

Press the power switch to start the instrument. The display screen will be lightened up.

## VII. RS232 Remote Control

Only HDP135V6S supports RS232 communication.

To use RS232 for remote control, please log in to the following website to download:

<http://hantek.com/products/detail/17189>

Or scan the QR code below to enter the website:



## VIII. Troubleshooting

1 If the AC power supply voltage is normal and the display screen does not light after the startup, it may be a fuse blown or other faults. Turn off the instrument, disconnect the power cable, replace the fuse, or ask a professional for inspection and repair.

2 For constant voltage output, if the output voltage is less than the setting value and the CC light is on, which indicates that the instrument is in current protection. It will automatically switch to constant current output state. At this time, check the load or increase the maximum current according to the use situation.

3 For constant current output, if the output current is less than the setting value and the CV light is on, which indicates that the instrument is in open circuit voltage protection. It will automatically switch to constant voltage output state. At this time, check the load or increase the maximum voltage according to the use situation.

4 If the fault persists, please contact Hantek.

## IX. Packing List

- 1 One Power Supply
- 2 One Power Cable
- 3 One Alligator Clip Test Line
- 4 Certificate of Conformity

## QingDaoHantek Electronic CO., Ltd.

Address: #35 Building, No. 780 Baoyuan Road, High-tech Zone, Qingdao City, Shandong Province, China

Telephone: 0532-55678770

Zip code: 266114

<http://www.hantek.com>