D3806 0-38VDC Step Up & Down CC/CV Power Converter Module

Module description

D3806 DC-DC step-up step-down module illustrated
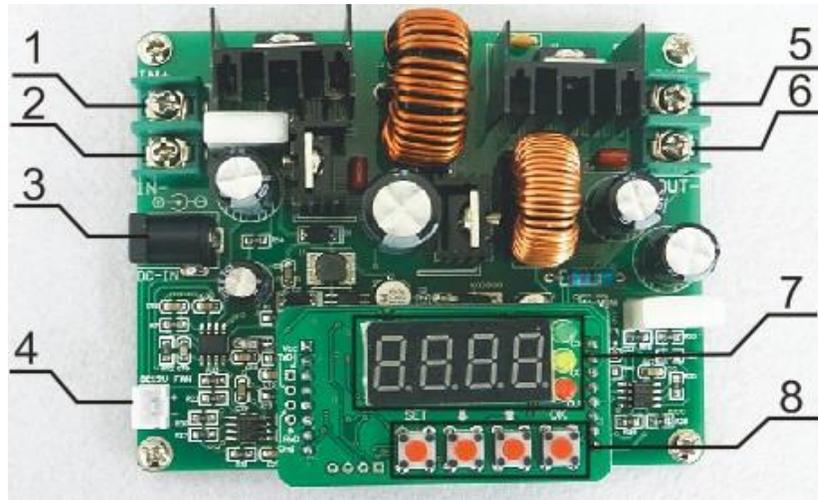

Table 2-1 DPS3806DC-DC step-down module description NC

Num	Explanation	Num	Explanation
1	Positive DC input +Vin	5	Positive DC output +Vout
2	Negative DC input -Vin	6	Negative DC output -Vout
3	DC Power socket	7	Digital and Indicators
4	+12V Fan Interface	8	Operation buttons

Display Description

Table 2-2   DPS3806DC-DC step-down module NC Display Description

Display content	Explanation
00.00	Voltage，00.00~38.00V
0.000	Electric current，0.000~6.000A
P.000、P0.00、P00.0、P000.	Power value, unit W, the decimal point position

	with the power of change and change position. For example: P.123 represents 0.123W, P1.23 represents 1.23W, P12.3 represents 12.3W, P102 represents 102W.
C.000、C0.00、C00.0、C000.	Capacity values, units AH, the decimal point is changed with the change of the capacity position. For example: C.123 represent 0.123AH, C1.23 represents 1.23AH, C12.3 represents 12.3AH, C123 represents 123AH.
--0-	Special features 0
--1-	Special features 1
--2-	Special features 2
--y-	Open Special features
--n-	Close Special features
SA.-*（＊represent 0~9）	Save parameters to the storage location of a storage location 0-9
Lo.-*（＊represent 0~9）	Adjust the position of a given set of
----	Save parameters
┌--n	reset

Instructions

This module has two operating modes: simple mode and full function. The factory setting is the simple mode, if you need to use the full functionality, you can open it.

Simple mode instructions：

1. Correct connection of input and output. Ensure that the input voltage is within the required range, be careful not to reverse the input polarity.

   Note：Input voltage range：10V~40V

   Maximum input current: 8A

Output Current Range：0A~6A

Output voltage range: 0V ~ 38V

2. Setting the desired voltage and current values. It should be noted that the voltage and current shows no units, but the two are different, the decimal point voltage value is displayed in the second decimal place (e.g. 00.00), the current value is displayed in the first place (e.g. 0.000). Setting voltage and current values as follows:

After power on, the default display is the voltage value. Voltage display format is "00.00", you can press the "SET" button to switch to the current. Current format of the show is "0.000". Press the button↑ to increase the setting value, press the button↓to reduce the set value. Short press accurately set, long press to quickly set. After the voltage or current value is changed, press the "SET" key will display "----", indicating that it save the voltage or current value of the current setting. The instrument default storage location for the M0. If you do not have to change the voltage or current value, press "SET" button will switch to the current or voltage values.

3. After the setting is completed, press the "OK" button to enable the output .

4. In the output state, you can press the button↑to increase the output voltage and press the button↓to reduce the output voltage when it display the voltage value. You can press the button↑to increase the current setpoint and press the button↓to reduce the Current setpoint when it display the current setpoint. Short press can be precisely set, long press can be quickly set. In the output state, short pressing the button "OK" can be switch to display the voltage, the current, the power, and the capacity. It can automatic display when you press the button "ok" 3 seconds, press again to cancel the automatic display. In the automatic display, press the button ↑↓invalid.

5. Output state, press "SET" button to turn off the output.

Explanation for full-function：

This module has three special functions. The default is disabled. If necessary, you can open them.

Function0: Output is automatically enabled when power is applied.

Function1: Save and transfer the parameter setting, showing power and capacity.

Function2: After the output parameters auto rotate

On / off method:

Press the "OK" button, and then to power up the module, Digital tube display will cycle between "--0-", "--1-", "--2-". In the display "--0-" when Release the "OK" button will turn on or off function 0, the display "--1-" Release the "OK" button will turn on or off function 1, the display "--2-" When you release the "OK" button 2 will be turned on or off function2. If you release the "OK" button after the digital display "--y-" indicates the current function is turned on, "--n-" indicates that the current is turned off.

1.Enable function 0: After connecting the power is automatically output.

2.Enable the function 1: In the absence of output state, it can be Cycled between the voltage "00.00", the current "0.000", Calls up the parameter "Lo.-0"   and save the parameter "SA.-0" when you press the "SET" button. The following example illustrates this feature:

Such as the 10V, 1.5A need to stored in the storage location 1, and call up the stored position 1 parameters.

①   Press "SET" button to switch to the voltage value, the set voltage value 10.00V, press the "SET" button to save the current set voltage value.

②   Press the "SET" button to switch to the current value, the current value is set 1.500A, press the "SET" button to save the current value.

③   Press the "SET" button to switch to "SA.-0", press the button ⬆⬇to select the storage location,here you need to adjust to "SA.-1", press the "OK" button , you can set "10V, 1.5A " and stored in the storage location 1.

④   Press the "SET" button to adjust to the "Lo0", press the button⬆ ⬇ to call up the parameters to select the desired storage location, here you need to adjust to "Lo.-1", press the "OK" button to store the location parameter 1, could be released

⑤   Native 0 to 9 groups of 10 storage locations, each storage location can be arbitrarily set voltage and current values, each storage location are independent of each other.

3.Enable function 2: Output will automatically round between the parameters as voltage, current, power and capacity.