200310

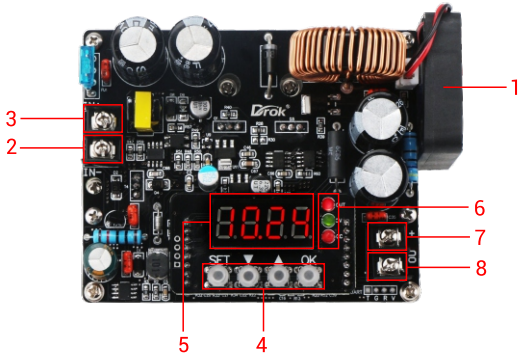
DROK DC Buck Converter

https://www.droking.com

Product Parameters:

Parameter	Value
Input Voltage Range	DC 10V-65V
Adjustable Output Voltage Range	DC 0-60V
Adjustable Output Current Range	0-12A
Output Power	0-720W
Output Voltage Setting Resolution	10mV
Output Current Setting Resolution	10mA
Power Supply Effect	CV<0.5%+10mV, CC<1%+10mA
Load Effect	CV<0.5%+10mV, CC<1%+10mA
Output Ripple	<50mVpp (input 54V, output 12V, current 5A)
100Hz Fluctuation Transmission Ratio	<1/10000
Typical Efficiency	92% (input54V, output 30V, current 5A)
Voltage Measurement Resolution	10mV
Current Measurement Resolution	10mA
Voltage Display Error	±1%+20mV
Current Display Error	±2%+20mA
Response Time	<50ms
Store Operation	M0~M9, 10 data groups
Operating Temperature	0~40℃
Store Temperature	-20~70℃
Cooling Method	With heat sink and fan, please pay attention to ventilation
Working Environment	Indoor use, maximum humidity 80%
Dimension	3.97*2.95*1.89 inch

Module Description:



Number	Note	Number	Note
1	Cooling Fan	5	Digital Tube
2	Input -	6	Working Status Indicator
3	Input +	7	Output +
4	SET (operation key)	8	Output -

Display Directions:

LED Display Shows	Direction
00.00	Voltage 00.00~60.00V
0.00A	Current 0.00A~12.00A
0.00C	Capacity 0.00AH~99.9AH
0.00H	Time 0.00H~9.59H

Using Instructions:

- Wiring:

Connect the input, output correctly. Make sure input voltage is within the requested range. It is forbidden to connect them reversely.

- Lock & Unlock Parameter Adjustment Button:

Lock-Button Function Introduction:

The Lock Button Function is designed to prevent misoperation. If enable Lock-Button Function, the ▲ and ▼ button will be locked. At this time, user cannot adjust output voltage or current value. However, “SET” and “OK” button are still available.

How to Enable Lock-Button Function:

At output cut-off status, press “SET” button. When it displays set voltage value, long press “OK” button till LED displays “-LoC”. At this time, the Lock-Button Function is enabled and the ▲ and ▼ button are locked.

How to Disable Lock-Button Function:

At output cut-off status, press “SET” button. When it displays set current value, long press “OK” button till LED displays “ULoC”. At this time, the buttons are unlocked.

- Setting Voltage and Current Value:

After powered on, the LED display will show the set voltage value by default. The set voltage value displays like “00.00”, unit is “V”. For example, “12.00” represents “12.00V”.

Click “SET” button, it can switch to set current value. Current value displays like “0.00A”, unit is “A”. For example, “1.20A” represents “01.20A”.

Setting Method: Press ▲ to increase set value, press ▼ to decrease set value. Short press for accurately setting, long press for quick setting. Press “SET” button will switch to set current value or voltage value.

- Turn on Output:

After finish setting voltage and current value, pressing “OK” button can turn on output. After output is turned on, pressing “OK” button can switch displaying voltage or current.

- Adjust Voltage and Current Value at Output Turned-on Status:

At output turned-on status, when LED displays voltage value, pressing ▲ can increase output voltage, pressing ▼ can decrease output voltage. When LED displays current value, pressing ▲ can increase set current value, pressing ▼ can decrease set current value. Short press for accurately setting, long press for quick setting.

- Cut Off Output:

At output turned-on status, pressing “SET” button can cut off output.

- Auto-output Function (Auto turn on output when powered on):

How to Enable Auto-output Function:

Long press “SET” button to enter parameter setting interface. Click ▲ to adjust it to “-F2-”, and then click “OK” button. LED displays “Yo-0”. Click ▲, switch it to display “Yo-1”. Click “OK” button to save the setting.

How to Disable Auto-output Function:

Long press “SET” button to enter parameter setting interface. Click ▲ to adjust it to “-F2-” and then click “OK” button. LED displays “Yo-1”. Click ▼, switch it to display “Yo-0”. Click “OK” button to save the setting.

- Display Output Capacity:

When the LED displays current value, long press “OK” button for more than 3 seconds to display x.xxC. At this time, the displayed value is output capacity value. Short pressing “OK” button can switch back to display current value.

When the LED displays voltage value, long press “OK” button for more than 3 seconds to display x.xxH. At this time, the displayed value is time. Short pressing “OK” button can switch back to display voltage value.

- Parameter Store and Call Out:

Parameter Store:

Long press “SET” button to enter parameter setting interface. Click ▲ or ▼ to adjust it to “-F0-”. Click “OK” button, LED displays “Sn-0”. Click ▲ or ▼ to change address. Finally, click “OK” button to store the set parameter to the corresponding address bit.

Parameter Call Out:

Long press “SET” button to enter parameter setting interface. Click ▲ or ▼ to adjust it to “-F1-”. Click “OK” button, LED displays “Lo-0”. Click ▲ or ▼ to change address. Finally, click “OK” button to store the setting and call out the parameter of the corresponding address bit.

There are 10 address bits, which are 0~9. Default output the data stored on the address bit 0 after powered on.

Cautions:

Cannot be used exceeding the voltage and current range, otherwise the module will be damaged.

Positive and negative pole cannot be connected reversely, otherwise the module may be damaged.

The instrument should be placed in dry conditions.

Do not try to disassemble the module before consulting seller support.

When the module is working, please do not move it violently so as to avoid causing damage to the internal circuit of the instrument.