XY-SK35H 35W 4A CVCC Buck Boost Power Supply Module

1.Description:

XY-SK35H is a DC-DC 35W 4A CVCC Adjustable Automatic Buck Boost Power Supply Module with a new generation of larger LCD display screen. It is a non-isolated converter which supports solar charging. It can convert DC 5V-30V to DC 0.6V-30V power supply and can provide stable outpu t.It can be used as ordinary buck power supply module, battery/solar charger or LED constant current drive and so on.

2.Features:

1>.Solar Charging: It can output a stable voltage value when the input voltage changes which is very suitable for solar energy systems such as solar charging, solar power supply, solar voltage conversion.

2>.Adjust CVCC: Constant voltage and constant current can not only stabilize the voltage, but also set the limit output current value to meet the current demand of the load. At the same time, it can also protect the load to avoid entering the over-current state.

3>.Larger HD LCD display screen: It adopts an upgraded full view large screen, which can display multiple parameters and working status at the same time.Experience more fluency.

4>.Programmable Multi Parameter: It can set/display output voltage/current/power,work time, output electric energy, output capacity, input voltage and ON/OUT/CV/CC work status.You can also set default output state after power on.

5>.Multiple Protection Mechanisms: Under-voltage, over-voltage, over-current, over-power protection, over-temperature, over-capacity, over energy protection and so on.

3.Parameters:

1>.Product Name: XY-SK35H 35W 4A CVCC Buck Boost Power Supply Module
2>.Work Voltage:DC 5V-30V
3>.Output Voltage: DC 0.6V-30V
4>.Output Current: 0~4A
5>.Output Power: 35W (50W with additional radiator)
6>.Voltage Display Precision:+/-0.5%+0.01V
7>.Voltage Display Resolution:0.01V
8>.Current Display Precision:+/-0.5%+0.003A
9>.Current Display Resolution:0.001A
10>.Conversion efficiency:About 88%
11>.Soft start:Yes
12>.Input Anti-reverse Protection:Yes
13>.Output Anti-backflow Protection:Yes
14>.Input Under-voltage Protection:Yes(4.7V-30V adjustable, default 4.7V)
15>.Output over-voltage Protection:Yes(0V-32V adjustable, default 32V)
16>.Output over-current Protection:Yes(0A-4.2A adjustable, default 4.2A)
17>.Output over-power Protection:Yes(0W-51W adjustable, default 36W)
18>.Over-temperature Protection:95℃
19>.Timeout Protection:Yes(0-100H adjustable, default OFF)
20>.Over-capacity Protection:Yes(0-9999AH adjustable, default OFF)
21>.Over-energy Protection:Yes(0-9999WH adjustable, default OFF)
22>.Work Temperature:-20℃~85℃
23>.Work Humidity:10%~85%RH
24>.Size:79*43*39mm

4.Set Parameter:

1>.**Set Output Voltage/Current**.
    1.1>.At Normal Display Status, short press 'V/A' button enter into voltage/current set interface.
    1.2>.There is a 'SET' and 'CV' symbol on left at the third line and the bit keep flashing. It means to modify the voltage value first.
    1.3>.Short press 'SW' button or Potentiometer can switch the modified bit.
    1.4>.Rotating potentiometer changes the voltage value.
    1.5>.Press 'V/A' button again to change current value and display 'CC' symbol and change value by the same method.
    1.6>.Press 'V/A' button again to save and exit.

2>.**Quickly Set Voltage or Current**.

2.1>.This method is use to set voltage or current by rotary potentiometer without any other additional operations.However, it is not recommended, because as long as the potentiometer is turned, the output value can be changed which is easy to misoperate.

2.2>.Set parameter 'FET' to select 'CV' or 'CC' or 'OFF'.

2.3>. 'CV' means enable voltage quick setting at Normal Display Status by rotary potentiometer.

2.4>. 'CC' means enable current quick setting at Normal Display Status by rotary potentiometer.

2.5>. 'OFF' means disable quickly set voltage or current function. No change when rotary potentiometer at Normal Display Status. Recommend!

3>.**Set Parameter**.

3.1>.At Normal Display Status, keep press 'SW' button 2second enter into parameter set interface.

3.2>.Short press 'SW' button to switch parameter.

3.3>.Short press potentiometer to switch the modified bit.

3.4>.Rotating potentiometer changes the parameter value.

3.5>.Short press 'ON/OFF' button to turn ON/OFF Max-capacity OAH, Max-energy OPH, Max-running-time OHP function. '----' means turn OFF this function

3.6>.Keep press 'ON/OFF' button to set parameter unit at Max-capacity OAH, Max-energy OPH interface.Switch the decimal point position to change the parameter unit for OAH/OPH. OAH range is 9.999Ah/99.99Ah/999.9Ah/9999Ah. OPH range is 9.999Wh/99.99Wh/999.9Wh/9999Wh.

3.7>.Keep press 'SW' button 2second to save parameter and exit.

4>.**Switch Display Input Voltage or Output Voltage**.

4.1>.At Normal Display Status, short press 'SW' button to switch display input voltage or output voltage at the first line.

4.2>.Note: There is a 'IN' symbol on left when display input voltage.

5>.**Query Parameter Power W, Capacity AH, Energy WH, Time H**.

5.1>.At Normal Display Status, short press potentiometer to switch display Power W, Capacity AH, Energy WH, Time H at the third line.

5.2>.Pay attention to unit change.

6>.**Lock/Unlock Parameter**.

6.1>.At Normal Display Status, keep press potentiometer 2second to lock or unlock parameter output voltage and current.

6.2>.There is a lock symbol on left at the first line.

6.3>.The parameter value cannot be changed at lock status.

6.4>.It can be used to protect parameters from being modified by mistake.Recommend!

5.Auxiliary Function:

1>.**Statistics Capacity, Energy and Work Time**.

1.1>.The statistics are started when turn ON output, and the statistics are stopped when the turn ON at next time.

1.2>.Stop statistics after turn OFF output.

1.3>.start the statistics again when the output power is turned on again.

1.4>.Keep press 'ON/OFF' button 2second to clear statistical value at Power, Capacity, Energy, Time display interface.

2>.**Set Maximum Output Capacity OAH**.

2.1>.It turns OFF output and LCD flashing display OAH when Statistics Capacity Value is more than set maximum value OAH if enabled OAH function.

2.2>.Automatically clear capacity statistics after the alarm is cleared.

2.3>.It will automatically count whether or not OAH is turn ON. But it will keep output if turn OFF OAH function.

3>.**Set Maximum Output Energy OPH**.

3.1>.It turns OFF output and LCD flashing display OPH when Statistics Energy Value is more than set maximum value OPH if enabled OPH function.

3.2>.Automatically clear energy statistics after the alarm is cleared.

3.3>.It will automatically count whether or not OPH is turn ON. But it will keep output if turn OFF OPH function.

4>.**Set Maximum Running Time OHP**.

4.1>.It turns OFF output and LCD flashing display OHP when Statistics Work Time is more than set

maximum value OHP if enabled OHP function.

     4.2>.Automatically clear work time statistics after the alarm is cleared.

     4.3>.It will automatically count whether or not OHP is turn ON. But it will keep output if disabled OHP function.It is countdown mode if enabled OHP.

     4.5>.This function can be used for timed power supply.

6.Use steps:

    1>.Connect right work voltage from VIN+ and VIN-.

    2>.Set output voltage and output constant current.

    3>.Set others parameters as require.

    4>.Remove work power supply.

    5>.Connect load at output terminal.

    6>.Re-power ON and use this item.

7.Note:

    1>. It is a DC power module,So it can not connect to AC power.

    2>. Please connect input before connect battery when use as charge and make sure output voltage is higher than battery voltage.

    3>. Please make sure input power is more than load power.

    4>. Please step down output power if module is hot.

    5.> Please read use manual and description before use.

8.Application:

    1>.High-power LED constant current drive

    2>.Lithium battery charging

    3>.Ni-Cd or Ni-MH battery charging

    4>.Solar panel

    5>.Wind Turbines

    6>.Ordinary power supply

    7>.Instrument voltage display

    8>.Test meter

    9>.Circuit test

    10>.Power conversion

9.Package:

    1>.1pcs XY-SK35H 35W 4A CVCC Buck Boost Power Supply Module