

USB3.0&DC Safety Protection Tester



Universal detection of various USB devices, a variety of DC power supply, a variety of battery capacity parameters and power-off protection during charging.

Products connecting applications:



Variety USB&DC Power USB&DC Detector (main interface) Various electronic load or other equipment

Front-end operation introduction:

After connecting in the way shown in the picture above, the display screen will light up. Shortly press "M" to switch the screen, continuously press "OK" to rotate the screen. In the main interface, continuously press "M" to make the corresponding value set flicker, and then press "M" and "OK" to adjust the value or clear the time of capacity and power. Flicker stops and the value is automatically saved with display of "OK", or continuously press "M" to adjust the following parameters to flicker downward, or continuously press "OK" for saving with display of "OK" to exit the setting.

Back-end operation introduction:

When power is off, press and hold the button, and then release the button after power is on to enter the back-end display interface now, and shortly press and hold "M" and "OK" to select up and down in order to light up the column set, and then continuously press "M", the value of the corresponding column will flicker. Then press "M" and "OK"

to adjust the value, the value is automatically saved with display of OK, or continuously press OK for saving with display of OK to exit the setting.

Android APP connects the Bluetooth:

After downloading and installing of APP, open the APP and click the bluetooth icon in the upper left corner of the interface, and select the model of JDY-19 or UD18 to connect and return to the APP interface. At this time, the bluetooth icon changes from grey to blue, indicating successful communication.

Warning: if you cannot find the bluetooth model of JDY-19 or UD18 on the APP of the electric energy meter, be sure to open the storage permissions and location information of the APP of this device in the Settings of the phone!

Factory setting and calibration method of back-end voltage and current:



Access the column 02 of the back-end, continuously press "M" to carry out zero adjustment of the voltage and current in the independent state of power supply; when in the column 03, adjust your standard power supply to 10V to access the measurement input end, and the current measurement voltage value will be displayed. At this time, press "OK" again, and the software will automatically correct the measurement and display the standard voltage value of 10V and the word "OK" to store the calibration value and exit the voltage calibration; At column 03, connect the standard constant-current load meter of the constant current value of 2A adjusted, and the current measured current value will be displayed. At this time,

continuously press "OK" again, and the software will automatically correct the measurement and display the standard voltage value of 2A and the word "OK" is displayed to store the calibration value and exit the current calibration; continuously press "OK" in column 09, the system will call factory settings value and calibration value.

Skill of parameters settings of full charging and power-off:

Observe and record the charging power value of your device after it is fully charged to 100%, then add 1~3W to this value to obtain the wattage that settings of full charging and power-off is less than continuous power value, in this way, when the system detects the power value that is less than the power of full charging of your device and continue the virtual charging set by you, the system protects your device by displaying the power off icon and cutting off the power output.

Tips: when the measured value is reached by comparing with threshold value of overcurrent /overvoltage low-voltage protection set, disconnect the output and display the interface disconnected.

Performance parameters:

- Voltage measuring range: 3.600 V to 32.00 V
- Current measuring range: 0.000 ~ 5.100 A
- Cumulative capacity range: 0 ~ 99999 mah
- Power cumulative range: 0 ~ 999.99 Wh
- Power metering range: 000.00 ~ 163.00 W
- Temperature measurement range: 0 ~ 80 °C
- Timing maximum time: 999 hours, 59 M 59 S
- USB D + voltage range: 0 V to 2.99 V
- USB D - voltage range: 0 V to 2.99 V
- Time to refresh: > 500 ms/times
- Measurement rate: 0.5/second
- Since the power flow: < 0.025 A
- Working temperature: - 10 ~ + 60 °C
- Working humidity: 10 ~ 80 (no doubt)
- The pressure of work: 80 ~ 106 kpa
- Product size: 62 mm * 62 mm * 14 mm

Test of mobile power supply capacity of power method and skill:

The charging treasure the electricity first, and then plug in the table, the capacity of power through the button to reset, and then plug in the electronic load on the connection diagram or cell phone to charge treasure to discharge, until the rechargeable battery, it is again electrify can read into the total capacity and the power value, this is the charge of capacity and power about value, because it is the internal power off memory function, so it can be a complete discharge, discharge process can also be multiple discharge, check again until after the treasure to battery charging capacity value.

Test the charger of the maximum output current method:

Connected in figure 1, change the load size make current increase voltage is reduced to the charger nominal voltage instantaneous, when the current value is the charger can output the maximum current value; To change the load to the charger aged 2 ~ 6 hours, nominal current value of discharge current voltage stability in the process of aging, the temperature of the charger is less than 50 degrees or so, explain this charger nominal current realistic, no empty mark, can satisfy the charging speed, on the contrary, if the voltage is reduced, current value difference is too big or too hot, even U watch alarm flashing and no output, measured charger belong to the current standard, quality inferior performance, this method also adapt to all USB output current test methods.

Tips: some users of the failure to understand the current nominal value is the output of the charger when the maximum load of the maximum output current value, is not for mobile phone charging current value, so the different load current value, actual should follow ohm's law to calculate the current value, and in the devices such as mobile phone, mobile phone in different status and at different times of the charging electric current curve is fluctuation change, U table only show the actual flow of current value, is not part of the user see U table testing is not the same as the display value and the nominal current value will doubt U table shows the accuracy of current measurement.