

1. Product Introduction

This product is an intelligent temperature controlled USB constant current electronic load, equipped with a high-speed cooling fan, used for capacity, load, and aging testing of power banks, chargers, USB cables, and power adapters. It supports fine current regulation and distinguishes between continuous 45W stable load and short-term three minute 65W extreme load.

2.Component Description

USB-A male connector: main input, connected to the test power supply or charger

Micro USB/Type-C female socket: Connect Micro USB data cable to test maximum current capacity, or connect Type-C female socket data cable to test maximum current capacity.

Do not use dual Type-C cables, This electronic load does not have PD voltage triggering protocol function!

Temperature controlled cooling fan+all aluminum heat sink: automatic speed regulation for cooling, the higher the power, the faster the speed

Load toggle switch: ON turns on the discharge load, OFF turns off the load

Multi turn precision potentiometer: rotate to adjust the discharge current size

3. Core specification parameters

Project Input interface USB-A male, Micro USB female, Type-C female

Input Voltage	DC 5V~24V
Test Current	0.1A~4.8A (total power not exceeding 65W)
Constant Power	Continuous power of 45W (capable of long-term continuous operation)
Maximum Power	Maximum power of 65W (single use \leq 3 minutes)
Constant current accuracy	$\pm 2\%$
Heat dissipation	intelligent temperature controlled high-speed fan, up to 12000 revolutions per minute
Size	77 × 63 × 45mm
Working environment temperature	-10°C~+60°C, humidity 10~80%, no condensation

4. Operation steps

Connection: Insert the USB-A male head into the charging device under test;

Power on: Turn the switch to ON, and the fan will automatically adjust speed according to the temperature.

Current regulation: Rotate the potentiometer clockwise to increase the discharge current, and counterclockwise to decrease the current.

Shutdown: After the test is completed, first adjust the current to the minimum → turn the switch to OFF → unplug the device.

5. Applicable scenarios

Actual capacity detection of mobile power bank, identification of falsely labeled batteries, stability testing of charger and fast charging head under full load output, USB data cable high current drop loss test, various DC power supply long-term aging durability test

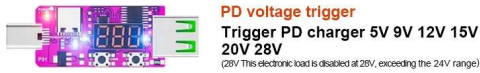
6. Safety precautions

- 1.Power limit:** Do not exceed 45W for long-term use; the maximum load of 65W should not exceed 3 minutes for a single use.
- 2.High temperature protection:** During operation, the aluminum heat sink is at an extremely high temperature and should not be touched by hand to avoid burns.
- 3.Voltage range:** The input voltage should not exceed 24V, otherwise the motherboard will be burned.
- 4.Heat dissipation requirements:** Do not cover the fan outlet; Immediately cut off power and cool down when the fan stops running.
- 5.Environmental requirements:** It is prohibited to use the equipment in damp or condensed environments.



The PD voltage trigger, USB tester, and PD charger data cable in the picture need to be purchased separately and are only for display purposes.

How to test 65W power?



Due to the lack of voltage triggering function in electronic loads, when a USB charger is inserted, the default output is 5V, so only 5V power can be tested.



If you need to test 65W power, you must output a voltage of 20V. For example, this instrument can directly output 20V and adjust the current to test 65W



If you need to test this PD charger 65W, it has multiple voltage levels of 5V, 9V, 12V, 15V, and 20V

65W GaN Pro



Insert CC port

Type C1/Type C2 Output: 5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/3.25A
USB2 Output: 5V/2A
USB2 Output: 5V/3A, 9V/3A, 12V/3A, 20V/3A
Type C1 - Type C2 Output: 45W+20W
Type C1+USB2 Output: 45W+18W
Type C1/Type C2+ USB1 Output: 60W+5W
Type C2+USB2 Output: 5V/3A
Type C1+Type C1/USB2+USB1 Output: 45W+15W+5W
Type C1+(Type C2+USB2)+USB1 output: 45W+15W+5W



With the help of this tester, voltage, current, and power can be viewed

insert CC port

PD voltage trigger



Adjust the voltage to 20V through a PD trigger

Adjusting the current can test a power of 65W

Attention: Do not exceed 65W for three minutes of testing!