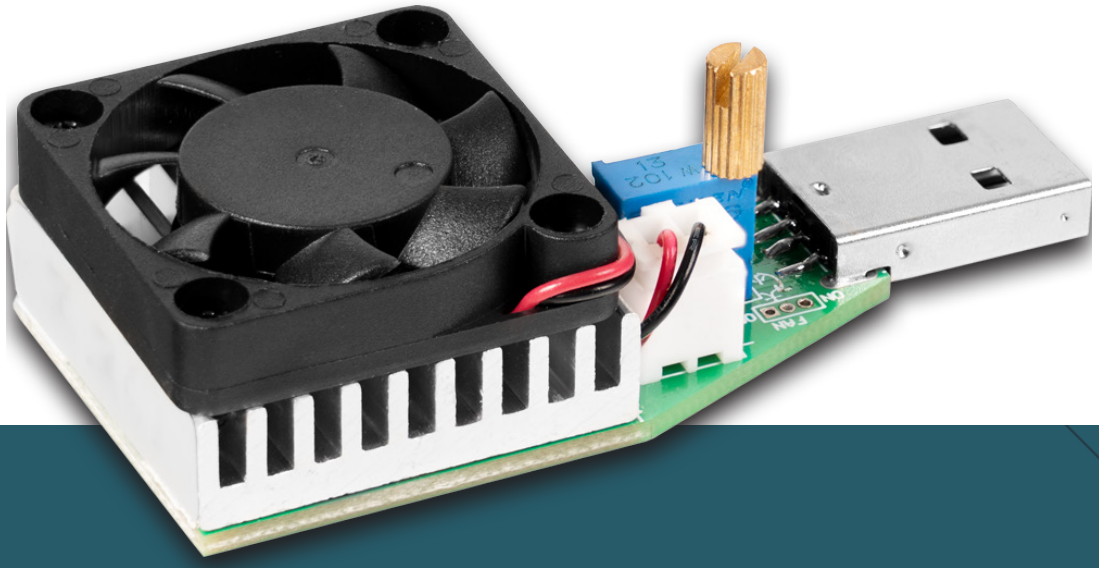


USB ELECTRONIC LOAD

JT-HD01

1. GENERAL INFORMATION

Dear Customer,
Thank you for choosing our product. Below, we will show you what you need to bear in mind when commissioning and using the product.

Should you encounter any unexpected problems during use, please do not hesitate to contact us.

The JT-HD01 is a practical and powerful USB electronic load module, designed to support engineers, developers, and service technicians in evaluating the performance of USB power sources. It provides a wide operating voltage range of 3.7 – 13 V DC and an adjustable load current of 0.15 A to 3 A, enabling detailed and repeatable tests across various USB-powered devices such as phone chargers, power banks, and DC adapters.

With a dissipation capability of up to 15 W, the JT-HD01 is ideal for stress testing, analyzing voltage stability under load, measuring current delivery capability, and performing battery discharge tests. Even during long test cycles or high loads, the module maintains safe operating temperatures thanks to its integrated temperature-controlled ball-bearing fan. The fan activates only when required, ensuring long lifetime, reduced noise, and optimized power efficiency.

Designed for convenience and fast setup, the JT-HD01 features a USB Type-A male connector for direct plug-in testing — no cables required. Additionally, solder pads on the PCB provide access to the USB data lines, allowing users to monitor communication signals or connect the module in custom testing environments.

Compact dimensions of 68 × 30 × 21 mm and a low weight of just 30 g make the JT-HD01 extremely portable and perfect for mobile field diagnostics. Whether used in R&D environments, QC processes, or educational labs, this USB load is a reliable, versatile, and cost-efficient tool for modern electronics testing.

2. SAFETY INSTRUCTIONS

Please read these safety instructions carefully before using the device or performing any connection or configuration tasks. Misuse or improper handling of this USB electronic load may lead to damage, overheating, or personal injury.

Using the device beyond its electrical or thermal limits can lead to damage, fire hazards, or personal injury. Always observe the technical specifications and safety rules when operating this product.

Intended use
This device is designed for testing and evaluating the power delivery of USB power sources (e.g., chargers, power banks, USB ports). It is not intended for continuous unattended operation or environments with critical safety requirements.
It is suitable for dry, indoor environments only. Do not use it outdoors or in humid, dusty, or wet conditions.

Operating limits
Use the device only within the specified voltage and current ranges (see technical data). Exceeding the maximum ratings (e.g., > 13 V or > 3 A) may cause damage or fire hazards.

Heat and ventilation
The load resistor and cooling fan may become hot during operation. Do not touch the heat sink or nearby components during or immediately after use.
Ensure adequate ventilation and avoid covering the device.
Do not operate near flammable materials.

Power safety
The module is intended for low-voltage DC systems only (max. 13 V). Never connect it to high-voltage or AC systems. Using the device outside its rated specifications may result in damage or electric shock.

Electrical connections
Always verify polarity and voltage before connecting a power source.
Do not operate the module if the USB connector or PCB shows signs of damage.
Use only stable and regulated DC sources for testing.

Fan control
The cooling fan is temperature-controlled and will activate automatically.
Do not obstruct or tamper with the fan.
Keep the airways clean and free of debris.

Supervision
Do not leave the device unattended during extended load tests. Monitor temperature, voltage, and current during use.

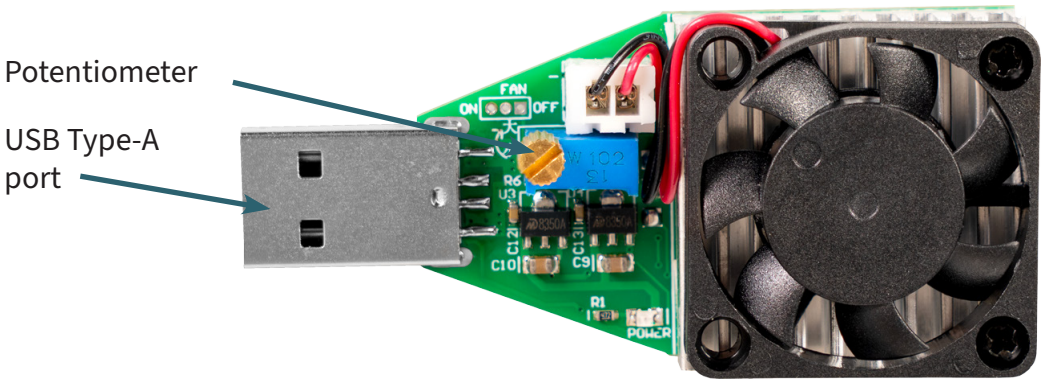
3. OPERATION

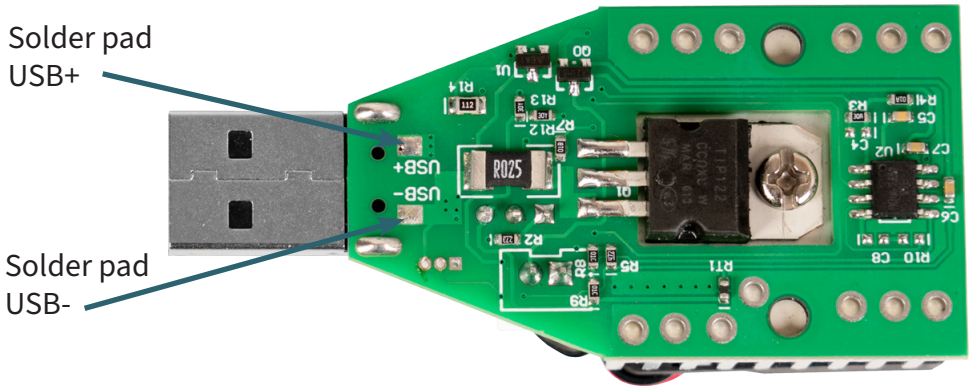
The USB load is simply plugged directly into a free USB Type-A port – the power consumption is set using the potentiometer.
To set the current correctly, we recommend using a USB meter or a power supply that displays the output current.

Turn the potentiometer clockwise to increase the power consumption of the load, or counterclockwise to decrease the power consumption of the load.

Using the solder pads on the back of the device, you can either monitor the voltage by connecting a measuring device, or you can also use the solder pads as a voltage input if you want to test a non-USB voltage source.

Be sure not to exceed the maximum input voltage of 13 V.





4. INFORMATION AND TAKE-BACK OBLIGATIONS

Our information and take-back obligations under the German Electrical and Electronic Equipment Act (ElektroG)



Symbol on electrical and electronic equipment:
This crossed-out wheelie bin symbol means that electrical and electronic equipment must not be disposed of with household waste. You must take old appliances to a collection point. Before disposal, you must remove any old batteries and accumulators that are not enclosed in the old appliance.

Return options:
As an end user, when purchasing a new device, you can return your old device (which essentially performs the same function as the new one purchased from us) for disposal free of charge. Small devices with external dimensions not exceeding 25 cm can be handed in in normal household quantities, regardless of whether you purchase a new device.

Option to return items to our company location during opening hours:
SIMAC Electronics GmbH, Pascalstraße 8, D-47506 Neukirchen-Vluyn

Return option near you:
We will send you a parcel label so that you can return the device to us free of charge. To do so, please contact us by e-mail at Service@joy-it.net or by telephone.

Packaging information:
Please pack your old appliance securely for transport. If you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

5. SUPPORT

We are also there for you after your purchase. If you still have questions or encounter any problems, we are also available to assist you via email, telephone and our ticket support system.

Email: service@joy-it.net
Ticket system: https://support.joy-it.net
Telephone: +49 (0)2845 9360 – 50

For further information, please visit our website:
www.joy-it.net

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