



[ENG] NetPing mini-UPS, User guide

## Содержание

[mini-UPS] Copyright and Disclaimer .....	4
[mini-UPS] Installation and Connection .....	5
[mini-UPS] Introduction .....	6
[mini-UPS] Operating and Storage Conditions .....	7
[mini-UPS] Review of a Mini-UPS Device .....	8
[mini-UPS] Shipping Kit .....	10
[mini-UPS] Sockets and Indication Elements.....	11
State Terminal Block.....	11
DC/BAT LED .....	11
OUTPUT VOLTAGE Block .....	11
DC INPUT Block .....	12
BAT Switch.....	12
[mini-UPS] Warranty .....	14



## [mini-UPS] Copyright and Disclaimer

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Developer and manufacturer:

NetPing east Co Ltd.

## [mini-UPS] Installation and Connection

**NetPing mini-UPS** can be installed on a horizontal or a vertical surface. A body of a device has holes for its mounting.

When mounting a device, there is a need to take into account the next restrictions:

- Do not power a device from two different power supply units simultaneously using a socket DJK02 and terminals +DC/GND;
- Avoid direct sunlight on a device;
- Do not install a device near heat sources;
- Do not connect any equipment, which can cause overload, to a device's outputs;
- Do not open a body of a device;
- Before a transportation or a long-term storage, set a switch BAT into the OFF position;
- Keep a switch 5V – 12V in a 5V position, if you do not plan to use a terminal 12V. This will increase a battery life.

*Important! When switching to the OFF position, a device goes to a power supply standby mode. A device goes out of this mode only after connecting a power supply. Switching to the ON position does not lead a device out of a standby mode. In a standby mode a voltage is not fed to UPS outputs.*

## [mini-UPS] Introduction

This user guide will help to become familiar with the peculiarities of a **NetPing mini-UPS** device operation as well as get an idea about its functionality and technical specifications, and prepare a device for operation.

A User Guide is designed for network administrators and users, who set up or operate a device. To work with a device properly, a user must have an idea about the principles of building and functioning of local networks as well as possess the next knowledge and skills:

- Basic knowledge in the area of local and global networks;
- Basic knowledge in the area of architecture and principles of work of TCP/IP networks;
- Basic knowledge in the area of architecture and principles of work of Ethernet networks.

## [mini-UPS] Operating and Storage Conditions

A device is designed for continuous round the clock operation indoors. In operating conditions of use, a device is resistant to an environment with temperature in a range of 0°C - +40°C (32 – 104 degrees Fahrenheit) and relative humidity in a range of 5% - 95 % at 25°C (77 degrees Fahrenheit) without moisture condensation. A device should be protected from direct moisture and direct sun light.

A construction of a device provides a reliable uninterrupted work during a long period of time without maintenance. Highly developed functionality of remote setting and configuration of a device allows changing any parameters remotely and centrally for the most of the devices.

Devices should be stored in a temperature range between - 40°C and +70°C.

In rooms for keeping a device, a content of dust, acid and alkali gases, aggressive gases and other harmful impurities causing corrosion, should not exceed a content of corrosion-active agents for atmosphere of type 1.

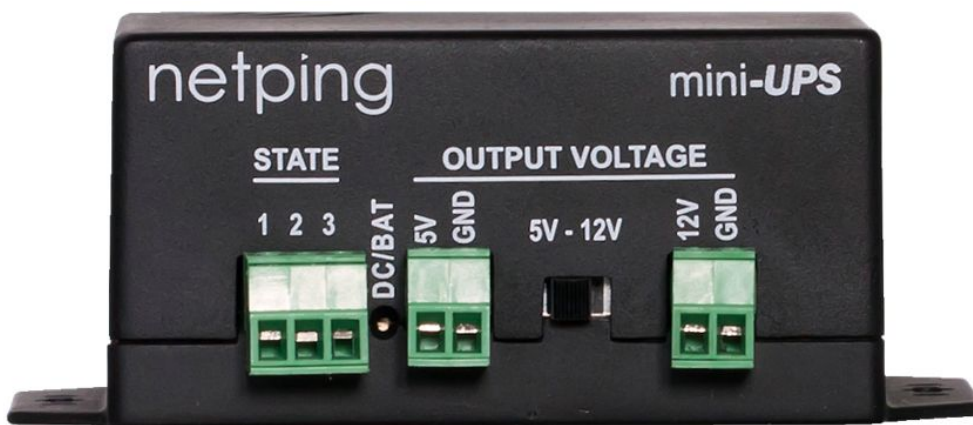
*Important! A device must be connected to a power supply socket with a grounding contact or a hole, where a contact, located at an outlet and connected to a ground wire, is inserted. Grounding must be performed according to the State Standard P 50571.21-2000. An infraction of this rule is a violation of a device operation conditions and may be dangerous to human lives as well as damage other devices!*

## [mini-UPS] Review of a Mini-UPS Device

Appearance of a device is shown on a picture:

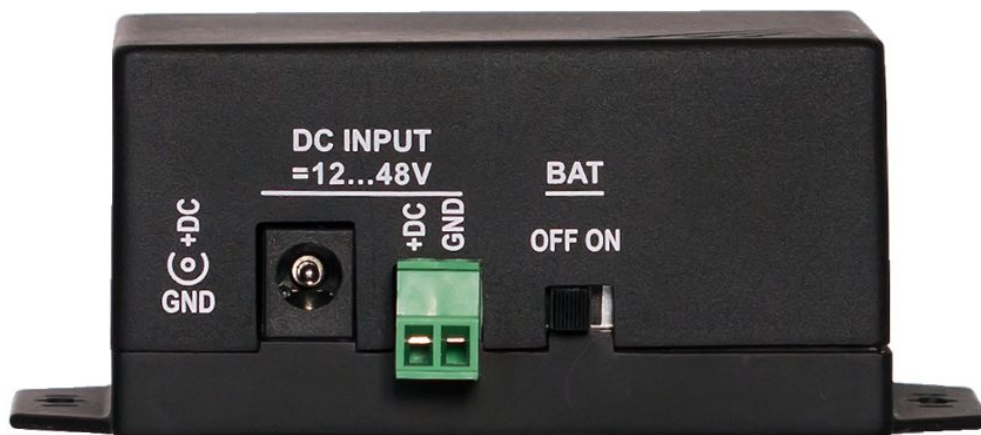


Front panel of a device:



Back panel:





Characteristics of a Device	Value
Voltage	12 V ... 48 V DC
Battery life of the device <a href="#">UniPing v3</a>	2 hours
Battery life of the device <a href="#">UniPing server solution v3/SMS</a>	4,5 hours
Weight	250 g
Shipping kit	a device, an adapter cord
Power plug type	DJK02 2.1 mm and a terminal
Temperature range	0°C ... 40°C
Dimensions of a device	75 x 95 x 40

## [mini-UPS] Shipping Kit

Into shipping kit are included:

- A device **NetPing mini-UPS;**
- Mating terminals – 4 pcs.;
- Power cable.

## [mini-UPS] Sockets and Indication Elements

### State Terminal Block

A state terminal block is a set of logic outputs (IO lines), which are used for a device status signalling.

A terminal 1 is an output “normal”. Its logic level “1” (no less than 2.4V) indicates an availability of an input voltage, a battery is charging. A level “0” (no more than 0.4 V) indicates a lack of an input voltage, a battery is discharging.

A terminal 2 is an output “critical level”. “1” is a normal battery level, “0” - a battery is critically discharged, it is issued 3-6 minutes before a device shutdown.

A terminal 3 – GND



### DC/BAT LED

DC/BAT LED. A green light means having a voltage on an input. A red one means there is no voltage on input, a battery is discharging.



### OUTPUT VOLTAGE Block

An OUTPUT VOLTAGE block, which is a UPS output, consists of 5V/GND, 12V/GND terminals and a 5V – 12V switch.

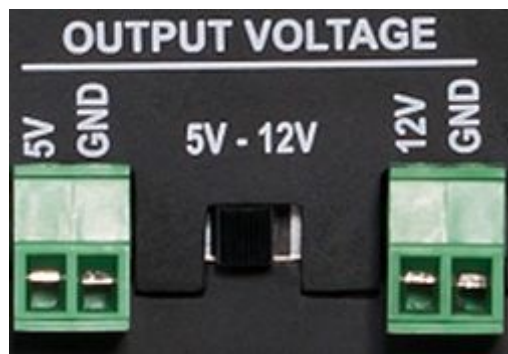
A switch 5V – 12V is used for turning on/off a 5V -> 12V transformation.

A terminal 5V is an output of UPS+5V.

There is always a voltage on this terminal during a device operation regardless a position of a 5V – 12V switch.

A terminal 12V is an output of UPS+12V. There is a voltage on this terminal only when a 5V-12V switch is at a 12V position.

*Important! Keep a switch 5V – 12V in a position 5V, if you do not plan to use a terminal 12V. This will increase a battery life time.*



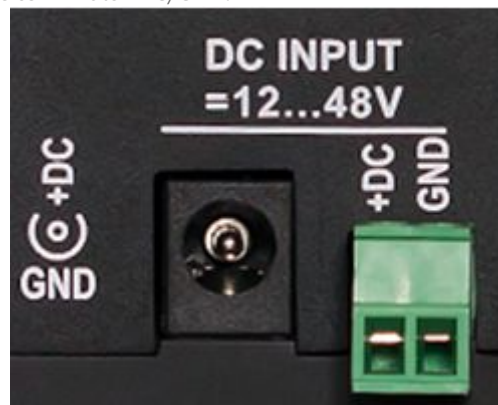
## DC INPUT Block

A DC INPUT block (picture 8), which is an UPS input, consists of a socket DJK02 for 2.1 mm dowel and +DC/GND terminals.

A DJK02 socket for a 2.1 mm dowel is used to power a mini-UPS device with the help of a power supply unit, for example, Power adaptor NetPing.

+DC/GND terminals are used to power a mini-UPS device with the help of other Netping devices, for example, Uniping v3, Uniping Server Solution v3/SMS. For these purposes, a 12V relay, built into a body of devices, is used.

*Important! It is prohibited to power a mini-UPS device simultaneously from two different power supply units through the socket DJK02 and the terminals +DC/GND.*



## BAT Switch

A BAT switch is used to unplug a battery before a transportation or a long-term storage of a device. A device supplies a voltage to outputs, when there is an external power supply, even if a switch is in an OFF position.

*Important! Switching to the OFF position puts a device into a standby power mode, when there is no external power supply. A device exits this mode when a power is supplied. Switching to the ON position will not put a device out of a standby power mode. In a standby mode a voltage is not supplied to UPS outputs.*



## [mini-UPS] Warranty

The manufacturer guarantees normal operation of the product within 24 months from the date specified on the warranty sticker if a buyer follows operating and storage conditions. Manufacturer warranty applies only to failure of a device which occurred because of defects in manufacturing process of products and components used. If during a warranty period the manufacturer receives a notice of such defects, it will repair or exchange the product (by its own discretion). If the manufacturer is unable to repair or replace a flawed item during a period of time determined by the current legislation, the manufacturer according to a customer's wish can return the amount paid for the product at the time of purchase. The manufacturer provides a limited warranty on firmware and device configuration software. In case of detecting any errors in the software which became known to the manufacturer on its own or from a customer, the manufacturer will fix these errors within a reasonable time and provide an update for the customer. Only the errors that block normal use of the device at conditions and for performing functions described in this User Guide are a subject to mandatory fix. This warranty does not apply to cases when defects appear because of: a misuse of a device, any modifications of a device without a written permission of the manufacturer, opening up a device (a warranty sticker on the case of a device is damaged) except cases foreseen by this description; repairing by unauthorized personnel, using or storing a device out of the range of allowable temperature and humidity, pressure, a software modification, and the reasons, listed below:

- A device failed because of the problems in a public electric network, plugging a device into power supply networks with invalid parameters, absence of grounding, etc. (power fluctuations and surges, overloading, etc.);
- A device failed because of having liquid inside;
- A device failed as a result of extreme temperatures;
- A device failed because of mechanical damage;
- A device failed because of connecting a power supply unit with invalid output voltage or a defective power supply unit;
- There are foreign objects, insects, etc inside the enclosure;
- During operation a voltage bigger than an allowable voltage range by the Ethernet standard has been supplied to the ports of a device.