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[ENG] NetPing Supply Voltage Sensor 995S2, User guide

[ENG] [995S2] Introduction

This guide will help you to get to know the features of the [NetPing Supply Voltage Sensor 995S2](#), get an idea of its functionality and technical specifications, and prepare the device for operation.

[ENG] [995S2] Disclaimer and Copyright

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Developer and manufacturer:

NetPing east Co Ltd.

[ENG] [995S2] Overview and Key Features

The physical configuration of the device is shown in the photo:



Bottom view:



View from above:



Device specifications	Meaning
Threshold response (valid only for 995S2 modification, intended for 220 V network)	178–193 V
Threshold release (valid only for 995S2 modification, intended for 220 V network)	155–175 V
Supply voltage required for the correct operation of internal components and maintain operability	70–250 B 50/60 Hz
Overvoltage impulses	up to 350 V for a duration of 50 ms, not more than 2 times per minute
Number of network voltage measuring channels	1 pc.
Operating Temperature Range	-30 ° C ... +50 ° C (without moisture condensation, normal humidity)
The type of output/condition of the contacts	A dry contact, switching (N.C. and N.O. contacts), voltage up to 24 V, current up to 0.5 A
The case/the degree of case protection	plastic/IP20
Indication	available
Weight	101 gram
Device dimensions	89 x 50 x 31

[ENG] [995S2] Connectors and Indication Elements

View from above

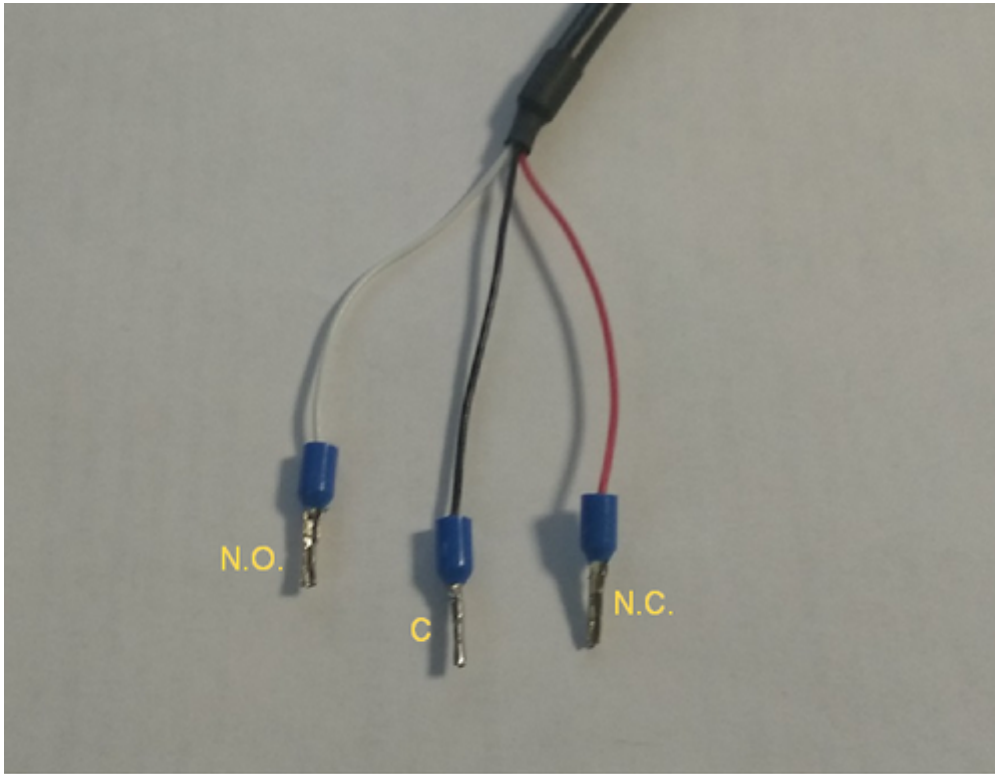


The sensor operation indicator is on when it is connected to the power supply.

Side view



The type of output contacts



N.O.-C pair - normally opened contacts. Opened when voltage failure is detected.

N.C.-C pair - normally closed contacts. Closed when registering a lack of voltage.

[ENG] [995S2] Installation and Connection

The supply voltage sensor can be installed on a horizontal or vertical surface. Mounting holes are not provided.

When you install the device, the following restrictions must be considered:

- Do not expose the device to direct sunlight.
- Do not install the device close to any heat sources.
- Do not open the case of the device.
- Avoid getting liquid on the sensor, particularly in the connectors.

Connection Order

Step 1.

Connect the sensor to the device and the power supply. The connection order does is not important, the sensor has galvanic isolation.

When you connect the sensor, it is recommended to disconnect the monitoring device/power control of the device from the mains supply (IP PDU).

- the black wire — common;
- the white wire — normally opened (break) contact
- the red wire — normally closed (live) contact



Step 2.

Open to the web interface of the monitoring device / IP PDU to start the configuration. The sensor settings in the device's web interface are specified in the firmware description, the section "Working with Channels of Discrete Input-Output" for the corresponding model here: <http://docs.netpingdevice.com/>.

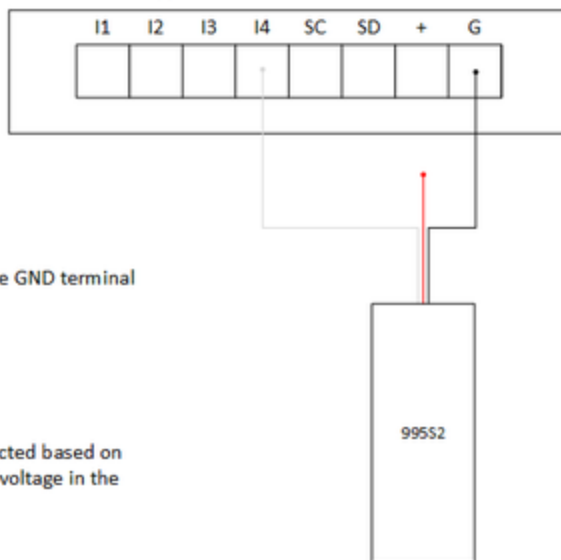
Sensor Connection Diagrams

The sensor output is a dry contact. The connection order of the N-NC or N-NO wires is not important.

NetPing 2/PWR-220 v3/ETH, NetPing 2 IP PDU ETH 53R14, NetPing 2 IP PDU GSM3G 203R15

- NetPing 2/PWR-220 v3/ETH — <http://www.netpingdevice.com/products/netping-2-pwr-220-v3-eth>
- NetPing 2 IP PDU ETH 53R14 — <http://www.netpingdevice.com/products/netping-2-ip-pdu-eth-53r14>
- NetPing 2 IP PDU GSM3G 203R15 — <http://www.netpingdevice.com/products/netping-2-ip-pdu-gsm3g-203r15>

NetPing 2/PWR-220 v3/ETH
 NetPing 2 IP PDU ETH 53R14
 NetPing 2 IP PDU GSM3G 203R15



- Black** - Connect the common wire to the GND terminal
- Red** - Normal closed (N.C.) contact
- White** - Normal open (N.O.) contact

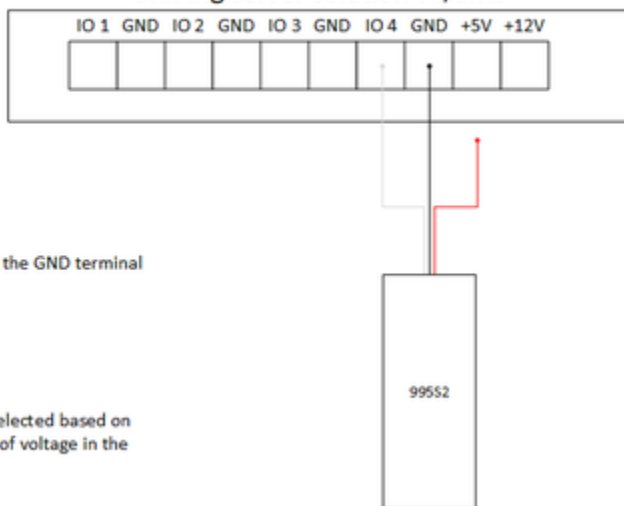
A pair of wires for connecting the sensor is selected based on the required signal in the absence/presence of voltage in the network. You can connect all three wires.

Sensor Loop	Device Terminal
Black (common)	GND
Red (N.C.)	I 1...4
White (N.O.)	I 1...4

UniPing server solution v3, UniPing server solution v4/SMS

- UniPing server solution v3 — <http://www.netpingdevice.com/products/uniping-server-solution-v3>
- UniPing server solution v4/SMS — <http://www.netpingdevice.com/products/uniping-server-solution-v4-sms>

UniPing server solution v3
 UniPing server solution v4/SMS



- Black** - Connect the common wire to the GND terminal
- Red** - Normal closed (N.C.) contact
- White** - Normal open (N.O.) contact

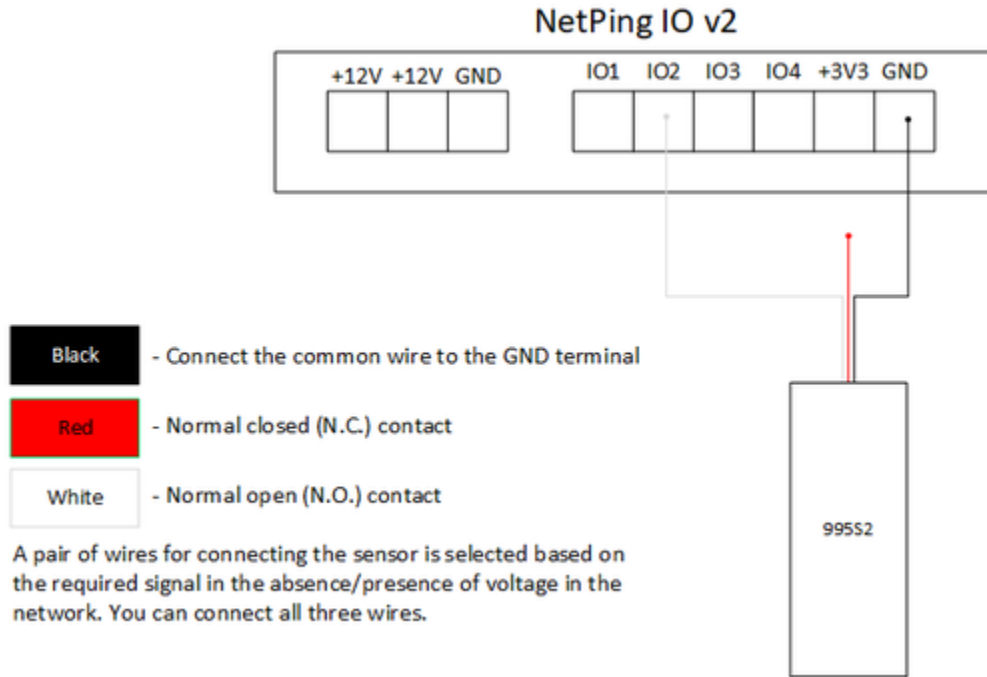
A pair of wires for connecting the sensor is selected based on the required signal in the absence/presence of voltage in the network. You can connect all three wires.

Sensor Loop	Device Terminal
Black (common)	GND
Red (N.C.)	IO 1...8

Белый (N.O.)	IO 1...8
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NetPing IO v2

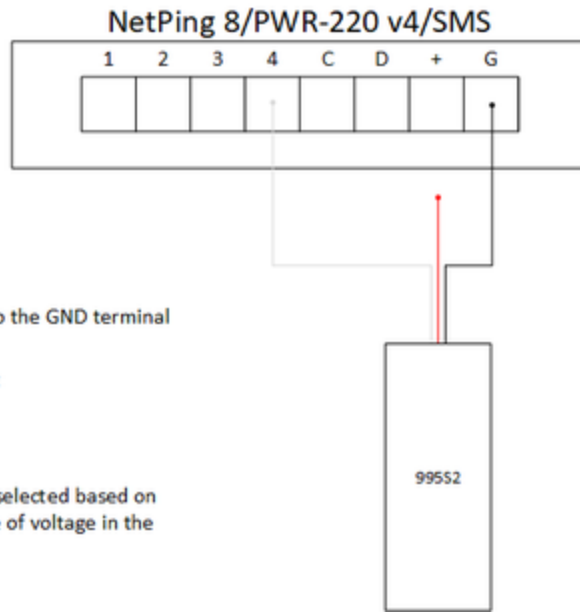
- NetPing IO v2 — <http://www.netpingdevice.com/products/netping-io-v2>



Sensor Loop	Device Terminal
Black (common)	GND
Red (N.C.)	IO 1...4
White (N.O.)	IO 1...4

NetPing 8/PWR-220 v4/SMS

- NetPing 8/PWR-220 v4/SMS — <http://www.netpingdevice.com/products/netping-8-pwr-220-v4-sms>



- Black** - Connect the common wire to the GND terminal
- Red** - Normal closed (N.C.) contact
- White** - Normal open (N.O.) contact

A pair of wires for connecting the sensor is selected based on the required signal in the absence/presence of voltage in the network. You can connect all three wires.

Sensor Loop	Device Terminal
Black (common)	G
Red (N.C.)	1...4
White (N.O.)	1...4

[ENG] [995S2] Shipping Kit of the Device

This shipping kit includes:

- [NetPing Supply Voltage Sensor 995S2](#) with the soldered wire of 1.5 meters long — 1 pc.;
- Quick Start Guide — 1 pc.;
- power cable IEC320 C7 to CEE7 XVII (SL-5+SL-8) of 1,8 meters long — 1 pc.;
- package cardboard box + a stick with the name — 1 pc.

[ENG] [995S2] 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.

[ENG] [995S2] Safety Precautions

The next information will allow users to avoid both injuries and damaging a device as well as connected equipment.

- The device should only be used on the power supply specified by the manufacturer. Use of any other type of power may damage the product.
- Do not use damaged power cords or sockets that are not firmly fixed to the wall.
- It is prohibited to open the case of the device.
- Do not drop the device and avoid force impact on it.
- Keep the device dry. It is also forbidden to touch the device and connected equipment with wet hands.
- Use the device only indoors.
- Do not place the device on a surface or on top of heating appliances such as microwave ovens, stoves, or radiators.
- Do not use the device in the locations marked as potentially explosive ones, with the possibility of explosion and the prohibition of the use of wireless devices (valid for devices with a built-in GSM modem).
- Protect the device from fire and extreme temperatures.
- Avoid the impact of direct sunlight on the device.
- Do not allow children to use a device.

Attention! Failure to comply with these conditions is a violation of the operating conditions of a device.

[ENG] [995S2] Operating and storage conditions

This sensor is designed for continuous round-the-clock operation indoors. The sensor is resistant to air temperature from -30 °C to +50 °C (without moisture condensation, at normal humidity) under operating conditions. The sensor should be protected from the impact of moisture and direct sunlight.

The sensor design provides reliable non-stop operation for a long time without the necessity to maintain it specially.

Store the device at a temperature from -40 °C to +70 °C.

In storage rooms, the content of dust, vapors of acids and alkalis, aggressive gases and other harmful impurities that cause corrosion should not exceed the content of corrosive agents for the atmosphere of 1 type.

[ENG] [995S2] Additional Documents and Links

The page of the device 995S2: <http://www.netpingdevice.com/products/voltage-sensor-995s2>

Manufacturer's website: <http://www.netpingdevice.com>

Technical support contacts: <http://www.netpingdevice.com/support>

Phone: +886-2-23121582

E-mail: support@netpingdevice.com