[ENG] NetPing POE 5 Switch GB322, User Guide

Содержание

[ENG] [NP-GB322] 1. Limitation of Liability and Copyright

Limitation of Liability and Copyright

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[ENG] [NP-GB322] 2. Introduction

This User Guide will help you get acquainted with the specialities and features of the device, get an idea of its functionality and technical characteristics and prepare the device for operation. It describes the model of the NetPing POE 5 Switch GB322 (hereinafter referred to as a "switch" or "device").

This User Guide is designed for network administrators and users, who set up or operate the device. To work with the 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.

# [ENG] [NP-GB322] 3. The Overview of NetPing POE 5 Switch GB322

The purpose of the device

NetPing POE 5 Swtich GB322 is an unmanaged 5-port switch. The speciality of this switch is power supply from POE (IEEE 802.3at or IEEE 802.3af) with the possibility of subsequent broadcasting of POE power supply. This allows you to chain the switches GB322 using only an Ethernet cable.

NetPing POE 5 Swtich GB322 makes it possible to connect to the Ethernet the required number of working places, VoIP phones, video cameras with minimal costs for cable infrastructure.

The external view

The front panel of the switch:

PoE standart switch
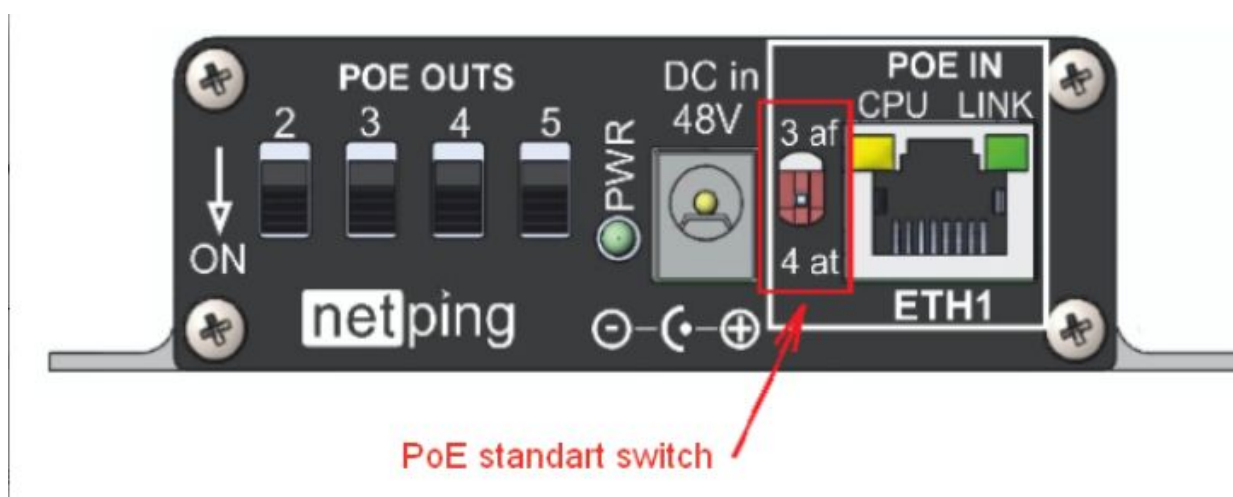
Element	Function
1. Power switches of ETH 2...5 ports	On/Off switches for power supply to ETH2..5 ports. An auto detection scheme is not supported.
2. A power indicator	Lights up when power is supplied and the device is operating.
3. A connector for external battery pack	A power supply connector 48V DC **up to 80W (1.5A).**
4. PoE standard switch	The choice of the power standard (standard 3 for IEEE 802.3af (PD 13W) and standard 4 for IEEE 802.3at (PD 25.5W)).
5.ETH1 10/100/1000 BASE-TX PoE in	ETH1 connector, input for PoE power supply.

The view of the back panel:
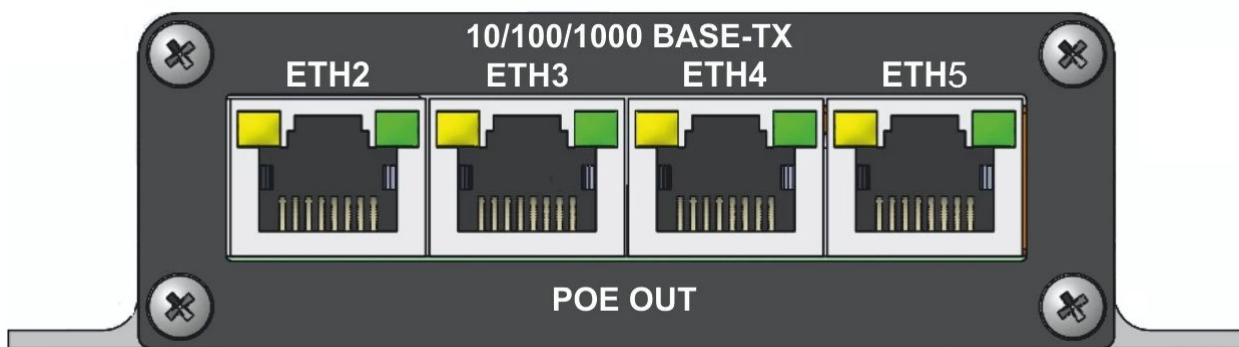
Element	Function
ETH2..5	4xETH 10/100/1000 BASE-TX PoE in

There are four Ethernet 10/100/1000-BASE-TX PoE out on the back panel of the device. There four connectors are of the IEEE 802.3af / 802.3at standard without the function of without the function of determining a compatible POE device Power supply to the PoE out ports is manually configured using switches on the back panel.

Power supply

> The maximum allowable output current of the external power adapter must not excede 1.5A

The device is delivered without a power supply in a delivery package. The device can be powered from POE of the Ethernet network or you can connect an external power supply unit with the voltage fro 34V up to 52V and the power of no more than 80W (to power the switch itself, excluding POE consumers). It is allowed to have the power supply of POE and the connection of an external power supply unit simultaneously (in this case, the device will be powered from an external power supply unit).

> If it is necessary to operate the device as a POE injector for other devices in the network supporting the IEEE 802.3af/at standard, use a 48 V power supply! The power of the power supply unit must be sufficient to provide the total power consumption of the switch itself and all POE consumers which are connected to it.

To connect an external power supply, use the DJK-02A connector with a 2.1 mm pin. The power connector polarity: pin "+" coating "GND".

As an external power supply unit for the switch we recommend you to use Power adapter 48V 1.5A.

[ENG] [NP-GB322] 4. Supply Package

The supply package includes:

- NetPing POE 5 Switch GB322;
- A User Guide;
- a set of fasteners (4 self-tapping screws + 4 dowel-nails);
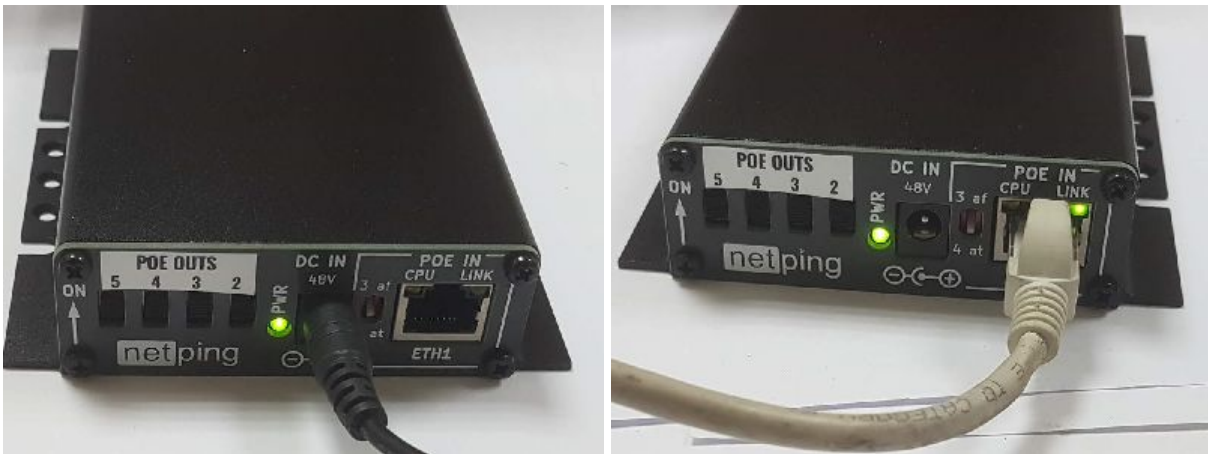- ZIP-package.

> A power adapter is not included in our supply package!

[ENG] [NP-GB322] 5. Installation and Connection

Installation and connection

In order to install the switch successfully, follow these steps:

1. Determine how this switch will be powered: from the external power supply unit or via PoE;
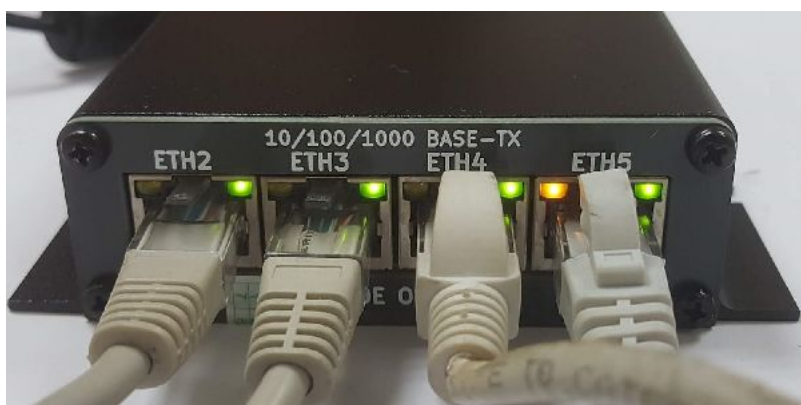

2. Determine on which ports this switch will provide the power according to PoE technology to other devices;

3. Set the PoE enable switches on the ports to the necessary position;

4. Put the switch in the place where you have planned to install it;

5. Apply power to the switch. The LED on the device case will light up;

6. Connect the patch-cords to the swtch.

[ENG] [NP-GB322] 6. PoE Technology in Switches GB322

NetPing POE 5 Switch GB322 has five ports: ETH1, ETH2, ETH3, ETH4, ETH5.

The ETH1 (PoE IN) port is located on the front panel of the device and used to apply power to the switch with the help of PoE injector or othe PSE device. The supply voltage range on the ETH1 port is 30-50 V. The ETH1 port is equipped with an af/at PoE compatibility circuit. The power standard is determined by the switch - standard 3 for IEEE 802.3af (PD 13W) and standard 4 for IEEE 802.3at (PD 25.5W).
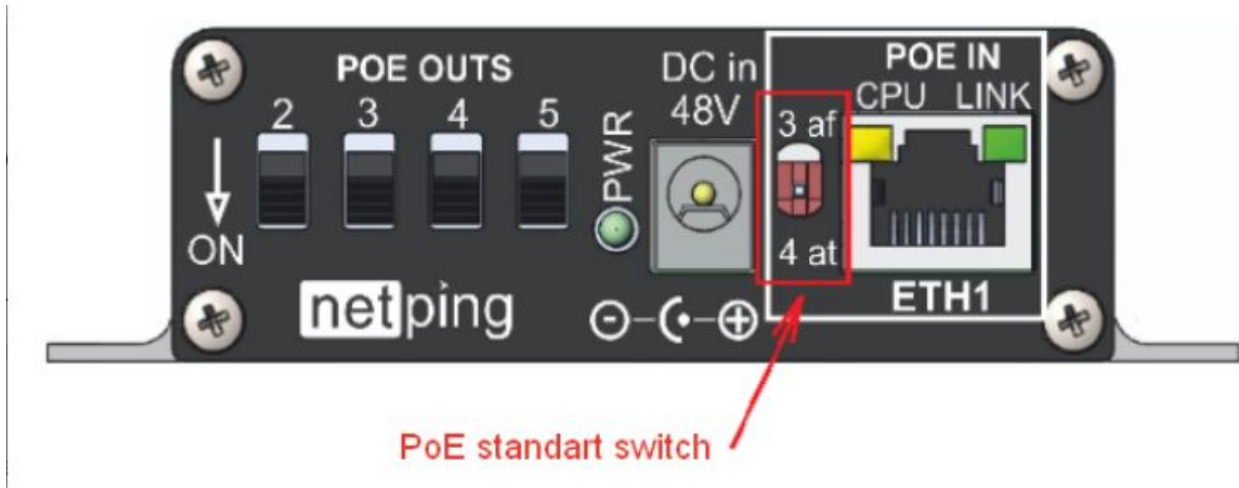

> The maximum allowable output current of the external power adapter must not exceed 1.5 A.

You can connect an external supply power unit with the voltage from 34 up to 52V and the power of no more than 80W(to power the switch itself, excluding POE consumers). It is allowed to have the power supply of POE and the connection of an external power supply unit simultaneously (in this case, the device will be powered from an external power supply unit).

NetPing POE 5 Switch GB322 can transmit power received from PoE injector or power supply to ports ETH2, ETH3, ETH4, ETH5.

> Attention! The PoE partner identification scheme do not work on ETH2, ETH3, ETH4, ETH5 ports. If the corresponding switches are set to ON, power is always supplied without identifying whether the partner supports PoE or not. Power is always supplied to both pairs for transmitting data and unused pairs (options A and B of the PoE standard). It is impossible to choose one of the variants.

By default, the switch GB332 does not transmit power to ETH2, ETH3, ETH4, ETH5 ports. In order to power one or several ports you have to set the switches on the back panel of the device to ON. The corresponding switch is responsible for certain port: 2, 3, 4, 5 for ETH2, ETH3, ETH4, ETH5 ports correspondingly.
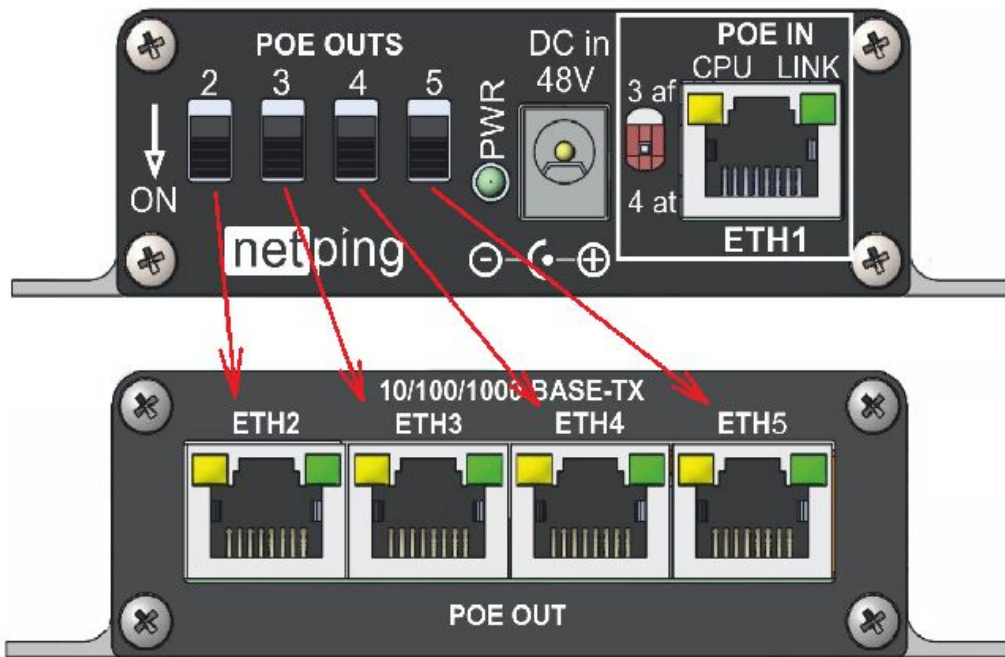
The maximum power consumed by the switch GB332 (and by all the PoE consumers connected to it) must not exceed 30W in accordance with the 802.3at standard. Consumers can be located behind different ports GB322 or behind a single port, there is no restrictions on the total power per port. The maximum power consumption of the switch inself is 7W, it can give the possibility to chain up to 4 switches GB332, using short patch-cords.

The voltage drop must be taken into account on ling lines, for example, for a 100-meter segment of Category 5 cable, the voltage drop can be up to 10 V per device. Thus, only two devices can be chained together.

[ENG] [NP-GB322] 7. Additional Documents and Links

The page of the switch GB332 on the manufacturer`s website:

The official website of the manufacturer: http://www.netpingdevice.com

The contacts of the technical support: support@netpingdevice.com

Phone: +886-2-23121582

Email: support@netpingdevice.com

[ENG] [NP-GB322] 8. Warranty Obligations

The Manufacturer guarantees normal operation of the product within 24 months from the date of purchase 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 the manufacturer receives a notice of such defects during a warranty period, 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 to 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 (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 the voltage bigger than the allowable voltage range by the Ethernet standard has been supplied to the ports of a device (it is actual for the devices with built-in Ethernet ports).

[ENG] [NP-GB322] 9. Operation Conditions and Storage

This device is designed for continuous round-the-clock operation only in closed spaces. In operating conditions the device is resistant to air temperature from -30°C up to+50°C and relative humidity from 5 up to 95% with the temperature of 25 °C (without moisture condensation). Protect the device from direct moisture and sunlight.

The design of the device provides for reliable continuous operation during a long time without the need for special maintenance. The advanced functionality of remote setting and configuration allows you to change any parameters remotely and centrally for a large number of devices.

The storage of the devices is carried out at the temperatures from -40 up to +70 °C.

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

> *Attention! The device must be connected to a power socket with a grounding prong or a hole that accepts the pin on the socket and connects to a grounding conductor. Grounding must be done in accordance with «Safety Rules for Working with Electrical Equipment». Failure to comply with this rule is a violation of the operating conditions of the device and can be dangerous to human life and harm other devices!*