

NS3552-8P-2S-V2 Quick Installation Guide

Figure 1: NS3552-8P-2S-V2 Industrial L2+ Multi-Port Managed Ethernet Switch



Package contents

Thank you for purchasing the IFS NS3552-8P-2S-V2 L2+ industrial managed switch. The description of this model is as follows:

NS3552-8P-2S-V2	Industrial 8-Port 10/100/1000T 802.3af/at PoE+ + 2-Port 100/1000X SFP Managed Switch
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Unless specified, the term “industrial managed switch” mentioned in this quick installation guide refers to the above model.

Open the box of the industrial managed switch and carefully unpack it. The box should contain the following items:

- The industrial managed switch × 1
- Quick installation guide × 1
- DIN rail kit × 1
- Wall mounting kit × 1
- DB9 to RJ45 interface RS-232 console cable × 1
- Dust cap × 11

If any of these are missing or damaged, contact your dealer immediately. If possible, retain the carton including the original packing materials for repacking the product in case there is a need to return it to us for repair.

Requirements

The industrial managed switch provides a remote login interface for management purposes. The following equipment is necessary for further management:

- Workstations running Windows® XP / 2003 / Vista / 7 / 8 / 2008 / 10, MAC OS X or later, Linux, UNIX, or other platforms are compatible with TCP/IP protocols.
- Workstations are installed with Ethernet NIC (Network Interface Card)
- **Serial port connection (Terminal)**
 - The above workstations come with a COM Port (DB9) or USB-to-RS-232 converter.
 - The above workstations have been installed with a terminal emulator, such as Hyper Terminal included in Windows XP/2003.
 - **Serial cable** – One end is attached to the RS-232 serial port, and the other end is attached to the console port of the managed switch.
- **Ethernet port connection**
 - Network cables – Use standard network (UTP) cables with RJ45 connectors.
 - The above workstations have a web browser and JAVA runtime environment plug-in installed.

Caution: When installing the industrial managed switch, ensure a clearance of two inches at the top and bottom of the device to allow for proper cooling.

Note: We recommend using Internet Explorer 11.0 or later to access the industrial managed switch. If the web interface of the switch is not accessible, turn off the anti-virus software or firewall and then try it again.

Wiring the power inputs

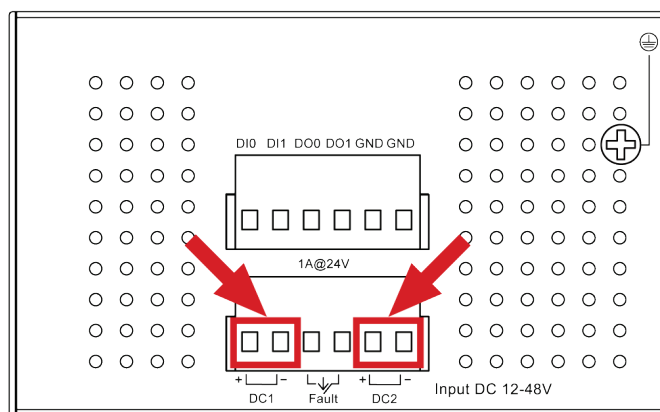
The upper panel of the industrial managed switch indicates a DC inlet power socket and consists of one terminal block connector within six contacts. Follow the steps below to insert the power wire:

1. Insert the positive/negative DC power wires into contacts 1 and 2 for Power 1, or contacts 5 and 6 for Power 2.

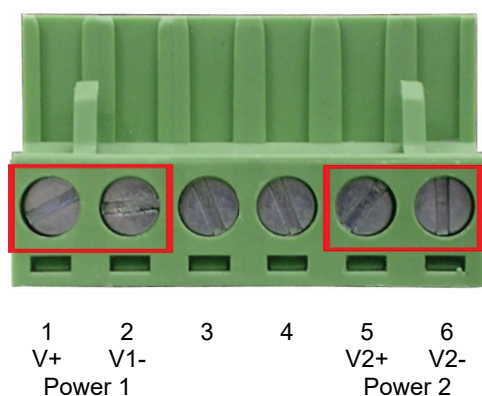
NS3552-8P-2S-V2: DC 12~48 V

Caution: Do not plug a DC power connector into the device while power is ON, as this will cause damage to the unit. This is NOT a hot-swappable device.

Figure 2: NS3552-8P-2S-V2 upper panel



2. Tighten the wire-clamp screws to prevent the wires from loosening.



Note: The wire gauge for the terminal block should be in the range from 12 to 24 AWG.

Mounting

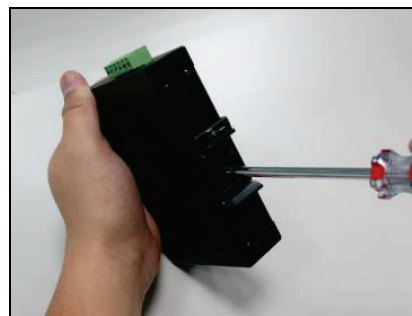
Note: Ensure that the industrial managed switch is mounted vertically with the power connectors on the top and a minimum of three inches above and below the switch to allow for proper air flow. This device uses a convection flow of hot air which rises and brings cold air in from the bottom and out of the top of the device. Do not mount the switch horizontally as this does not allow air to flow up into the device and will result in damage to the switch. Do not tie DC1 to DC2. DC2 is for secondary power redundancy. Do not plug DC power into the device while the AC power cord is plugged in. This is not a hot-swappable switch. Hot-swapping this device will result in damage.

DIN-rail mounting installation

To replace the wall-mount application with DIN-rail application on industrial gigabit Ethernet switch, refer to the following figures to screw the DIN-rail on the industrial gigabit Ethernet switch.

To hang the industrial gigabit Ethernet switch, follow the steps below:

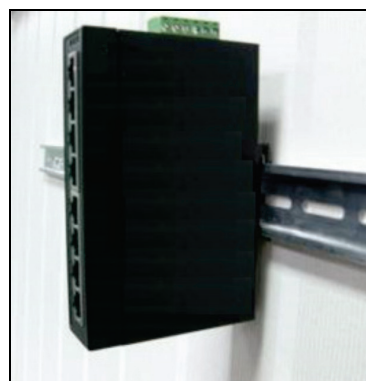
1. Screw the DIN-rail on the industrial gigabit Ethernet switch.



2. Place the bottom of DIN-rail lightly into the track.



3. Ensure that the DIN-rail is secured to the track.



To remove the industrial gigabit Ethernet switch from the track, carefully pull out the bottom of the DIN-rail to remove it from the track.



Wall-mount plate mounting

To install the industrial gigabit Ethernet switch on the wall, follow the steps below.

1. Remove the DIN-rail from the industrial gigabit Ethernet switch. Loosen the screws to remove the DIN-rail.
2. Place the wall-mount plate on the rear panel of the industrial gigabit Ethernet switch.



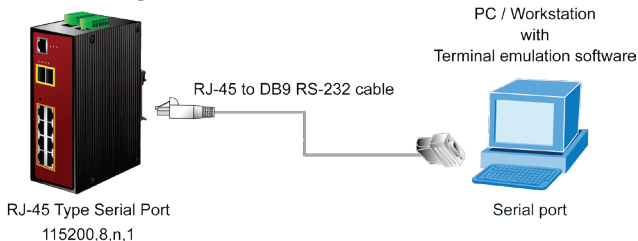
3. Use the screws to screw the wall-mount plate on the industrial gigabit Ethernet switch.
4. Use the hook holes at the corners of the wall-mount plate to hang the industrial gigabit Ethernet switch on the wall.
5. To remove the wall-mount plate, reverse the steps above.

Terminal setup

To configure the system, connect a serial cable to a COM port on a PC or notebook computer and to RJ45 type serial (console) port of the industrial managed switch. The console port of the industrial managed switch is DCE already so that you can connect the console port directly through a computer without the need of null modem.

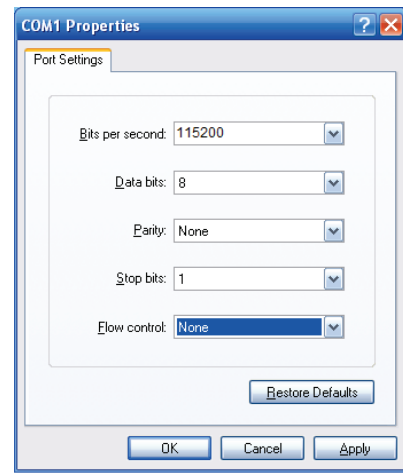
Figure 3: Console connectivity

Industrial Managed Switch



A terminal program is required to make the software connected to the industrial managed switch. Windows' Hyper Terminal program may be a good choice. The Hyper Terminal can be accessed from the **Start** menu.

1. Click **Start > Programs > Accessories > Hyper Terminal**.
2. When the following screen appears, ensure that the COM port is configured as shown below. Click **OK** when finished with configuration.



3. Log in to the console. After the terminal has been connected to the device, power on the industrial managed switch. The terminal displays "running testing procedures".

When the following dialog box in Figure 4 below appears, type the factory default user name "**admin**" and password "**admin**".

User name: **admin**

Password: **admin**

Note: Before connecting to a TruVision Navigator video surveillance system network, the default IP address must be changed to the IP address assigned for TruNav by the network administrator.

Figure 4: Console login screen

```
> diag -p
> fis load -x linux
MD5 signature validated
Stage1: 0x80100000, length 4507080 bytes
Initrd: 0x80600000, length 188416 bytes
Kernel command line: init=/usr/bin/stage2-loader loglevel=4
> exec
Now booting linux kernel:
Base address 0x80080000 Entry 0x80100000
Cmdline : init=/usr/bin/stage2-loader loglevel=4
Active fis: linux
[ 0.371597] mx35 spi0.3: NAND Flash Disable (Caracal)
00:00:00 Stage 1 booted
00:00:01 Loading stage2 from NOR flash partition "linux"
00:00:18 Overall: 17443 ms, ubifs = 1131 ms, rootfs 16141 ms of which xz = 0 ms
of which untar = 0 ms
00:00:37 Starting application...
Using existing mount point for /switch/
Press ENTER to get started

Username: admin
Password:
NS3552-8P-2S-V2#
```

Note:

1. For security purposes, change and memorize the new password after this first setup.
2. Only commands in lowercase letters are accepted in the console interface.

Configuring the IP address

The industrial managed switch is shipped with the default IP address shown below:

IP Address: **192.168.0.100**
Subnet Mask: **255.255.255.0**

To check the current IP address or modify a new IP address

for the industrial managed switch, use the following procedures:

Display of the current IP Address

1. At the “#” prompt, type “show ip interface brief.”
2. The screen displays the current IP address as shown in Figure 5 below.

Figure 5: IP information screen

```
Press ENTER to get started
Username: admin
Password:
NS3552-8P-2S-V2# show ip interface brief
Interface Address Method Status
-----
VLAN 1 192.168.0.100/24 Manual DOWN
NS3552-8P-2S-V2#
```

Configuration of the IP address

3. At the “#” prompt, type the following command and press Enter.

```
NS3552-8P-2S-V2# configure terminal
NS3552-8P-2S-V2(config)# interface vlan 1
NS3552-8P-2S-V2(config-if-vlan)# ip address
192.168.1.100 255.255.255.0
```

The previous command applies the following settings for the industrial managed switch.

IP Address: 192.168.1.100

Subnet Mask: 255.255.255.0

Figure 6: Configuring the IP address screen

```
Press ENTER to get started
Username: admin
Password:
NS3552-8P-2S-V2# show ip interface brief
Interface Address Method Status
-----
VLAN 1 192.168.0.100/24 Manual DOWN
NS3552-8P-2S-V2# configure terminal
NS3552-8P-2S-V2(config)# interface vlan 1
NS3552-8P-2S-V2(config-if-vlan)# ip address 192.168.1.100 255.255.255.0
NS3552-8P-2S-V2(config-if-vlan)#
```

4. Repeat step 1 to check if the IP address has changed.

Store the current switch configuration

5. At the “#” prompt, type the following command and press Enter.

```
# copy running-config startup-config
```

Figure 7: Saving current configuration command screen

```
Press ENTER to get started
Username: admin
Password:
NS3552-8P-2S-V2# show ip interface brief
Interface Address Method Status
-----
VLAN 1 192.168.0.100/24 Manual DOWN
NS3552-8P-2S-V2# configure terminal
NS3552-8P-2S-V2(config)# interface vlan 1
NS3552-8P-2S-V2(config-if-vlan)# ip address 192.168.1.100 255.255.255.0
NS3552-8P-2S-V2(config-if-vlan)# exit
NS3552-8P-2S-V2(config)# exit
NS3552-8P-2S-V2# copy running-config startup-config
Building configuration...
do not reset or power off the device!
% Saving 3089 bytes to flash:startup-config
NS3552-8P-2S-V2#
```

If the IP is successfully configured, the industrial managed switch applies the new IP address setting immediately. Access the web interface of the industrial managed switch through the new IP address.

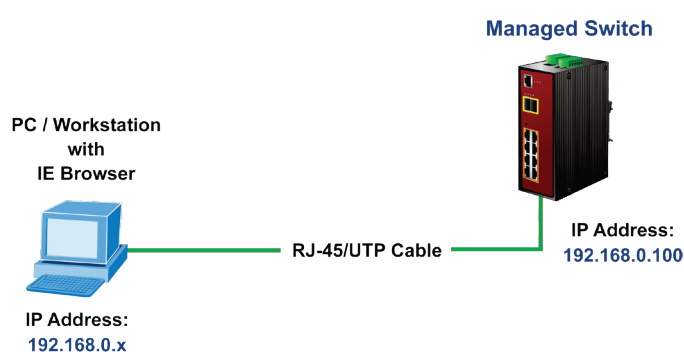
Note: If unfamiliar with the console command or the related parameter, type “help” in the console to obtain the Help description.

Starting web management

The section describes how to start up the web management function for the industrial managed switch. Note that the industrial managed switch is configured through an Ethernet connection. Ensure that the manager computer is set to the same IP subnet address.

For example, if the default IP address of the industrial managed switch is 192.168.0.100, then the manager computer should be set to 192.168.0.x (where x is a number between 1 and 254, except 100), and the default subnet mask is 255.255.255.0.

Figure 8: IP management diagram



Logging in to the industrial managed switch

1. Use the Internet Explorer 11.0 or later web browser and type the IP address `http://192.168.0.100` (the factory-default IP address) to access the web interface.
2. When the following dialog box appears, enter the default user name “admin” and password “admin” (or the password you have changed before) as shown in Figure 9 below.

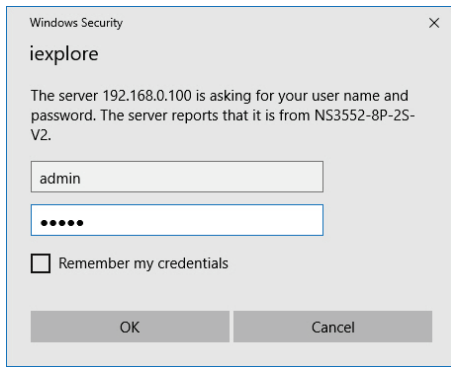
Default IP Address: **192.168.0.100**

Default User Name: **admin**

Default Password: **admin**

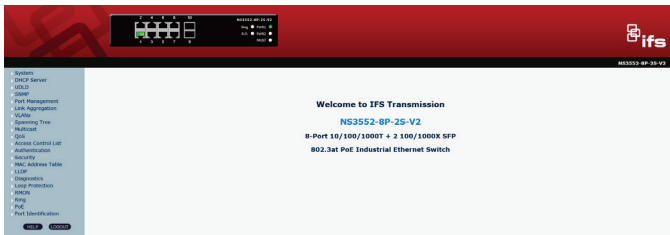
Note: Before connecting to a TruVision Navigator video surveillance system network, the default IP address must be changed to the IP address assigned for TruNav by the network administrator.

Figure 9: Login screen

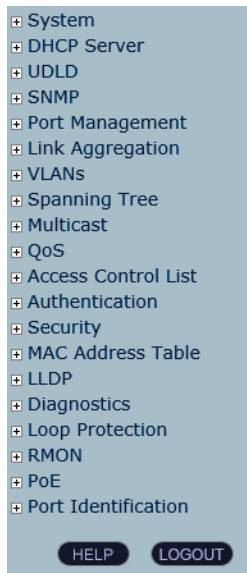


- After typing the password, the main screen appears as shown in Figure 10 below.

Figure 10: Main web interface screen



- The switch menu on the left side of the web page permits access to the commands and statistics provided by the industrial managed switch.



Refer to the User Manual for further information about using the web management interface.

Note: For security purposes, change and memorize the new password after this first setup.

Saving the configuration

The running configuration file is stored in the RAM of the managed switch. In the current version, the running configuration sequence of running-config can be saved from the RAM to FLASH by executing the Save Startup Config command. After doing this, the running configuration sequence

becomes the startup configuration file (i.e., the saved configuration).

To save all applied changes and set the current configuration as a startup configuration, the startup-configuration file is loaded automatically across a system reboot.

- Click **System > Save Startup Config**.



- Click the **Save Configuration** button.

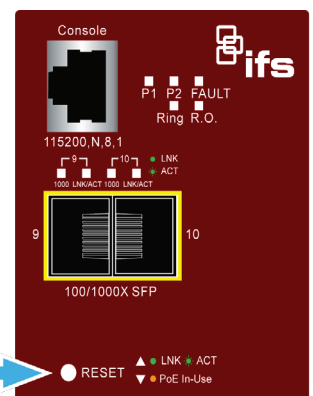
Save Running Configuration to startup-config

Save Configuration

Resetting the switch to default

To reset the IP address to the default IP address “192.168.0.100” and the user password to factory default mode (default password is “admin”), press the hardware reset button on the front panel for about 10 seconds. After the device is rebooted, log in to the management web interface within the same subnet of 192.168.0.xx and default password. Note that all the previous setups are erased after the factory default reset.

Figure 11: Reset button



RESET Button

Contact information

Europe, Middle East, and Africa

W Go to www.firesecurityproducts.com/en/contact

Australia

E cs@firesecurityproducts.zendesk.com

W www.firesecurityproducts.com.au/support

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Kelvinstraat 7, 6003 DH Weert, Netherlands

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Class A: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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- (2) This Device must accept any interference received, including interference that may cause undesired operation.

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Contact information

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Product documentation

Please consult the following web link to retrieve the electronic version of the product documentation. The manuals are available in several languages.

