



---

FTTO Switch "GigaSwitch V3"

## **Special Technical Features**



**Made in Germany**

# GigaSwitch V3 - Installation Switch System

The new Nexans "GigaSwitch V3 SFP-I ES3" is our next generation pure Gigabit installation switch system for FTTO applications. The very compact design of this switch allows a snap-in installation (no tools needed) in standard 45 mm cable duct systems or floor boxes without special mounting frames!

## Full Gigabit Ethernet FTTO Switch



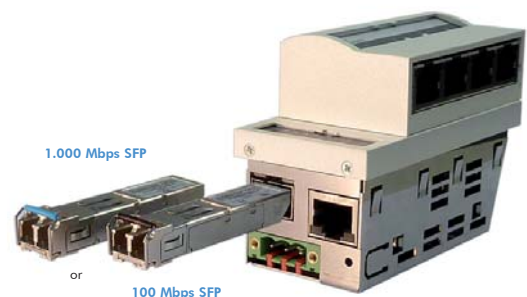
- 6 Port 10/100/1000 Mbps Switch
- 45 mm Form Factor (45 mm x 90 mm)
- No Tools needed for installation (Snap In)
- Memory Card Interface
- Rotatable Twisted Pair Module
- Power over Ethernet
- Full managed (WEB/SNMP/TELNET)
- SSH, https, SNMPv3 ...
- Support of Jumboframes
- Cisco Interoperability



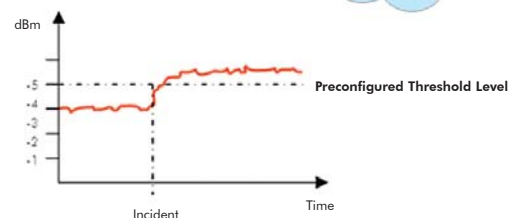
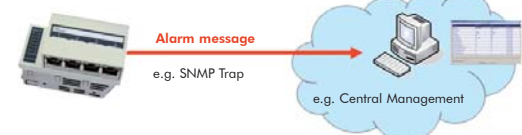
## SFP VARIO Uplink Interface (SFP=Small Form Factor Pluggable)

The GigaSwitch V3 SFP-I ES3 is equipped with a Small Form Factor Pluggable (SFP) Uplink VARIO Interface which can be operated with 100Mbps or 1000Mbps SFP Transceiver Modules. By using SFP modules with Digital Diagnostic Monitoring Function you are able to monitor the optical parameters (optical input power, optical output power, laser bias current) and to recognize upcoming problems with the fiber optic link at an early stage! The Nexans switch management allows defining "Threshold Values" for Laser Bias Current, Output Power and Input Power! By using these functionalities as an early warning system the network availability can be increased drastically!

## Vario Uplink Interface (100/1.000 Mbps)

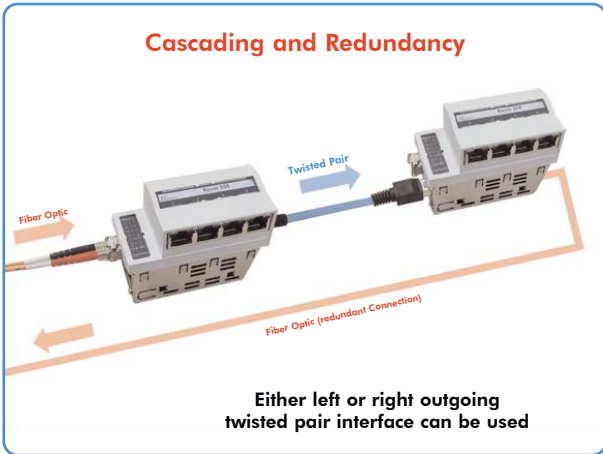


**„Early Warning System“  
for fiber optic connections**  
Increased System Availability!



# GigaSwitch V3 - Installation Switch System

## I Ways Cascading and Redundancy



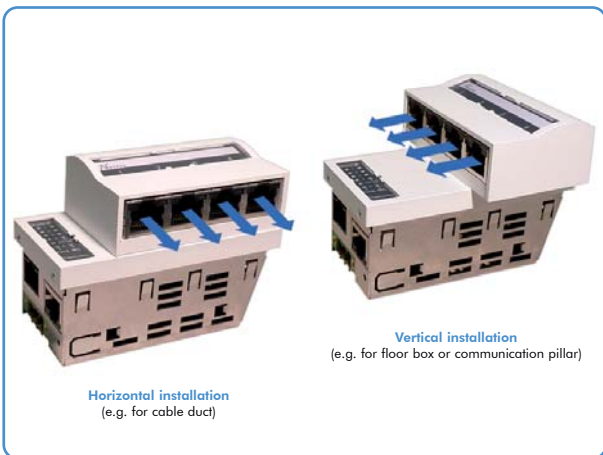
### Cascading

Besides four RJ45 user ports with 10/100/1000 Mbps capabilities it also offers an additional 10/100/1000 Mbps RJ45 Uplink Interface on both short sides of the switch. Depending on the incoming direction, the Twisted Pair Cable can be connected to the more suitable RJ45 port.


### Redundancy - Rapid Spanning Tree

All Switch Systems are supporting the standardized "RSTP - Rapid Spanning Tree Protocol". This ensures an automatic and rapid switchover to a redundant route in case of a transmission line failure and thereby increases the availability of the network significantly!

## I Horizontal or vertical installation

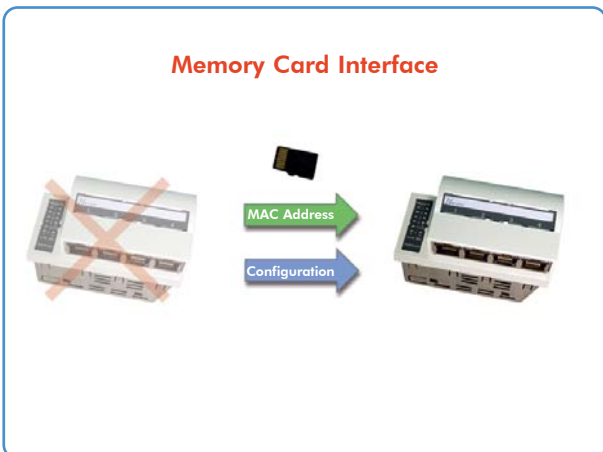


The Twisted Pair module of the switch can be installed in a vertical as well as in a horizontal way, i.e. one switch system can be used for both horizontal and vertical installations. There is no need to order two separate installation switch systems. The Twisted Pair (TP) User Ports of the rotatable TP module are mounted in a 90° position. This feature ensures a safe and space saving connection of the TP patch cables. It even allows installation in floor service outlets with reduced mounting depth.



**Less spare parts!**  
Same system can be used for cable duct and under floor installation.

## I Memory Card



The optional Memory Card always stores the complete and most actual configuration of the switch automatically. In case of a system exchange you just need to take out the Memory Card of the old switch and insert it into the new switch. During the boot process the new switch will then take over the old configuration from the Memory Card. Furthermore each Memory Card has got its own MAC Address. As soon as a Memory Card is inserted into a system, the active MAC address is the MAC Address of the Memory Card, i.e. there is no need to change routing tables in case of a system exchange!

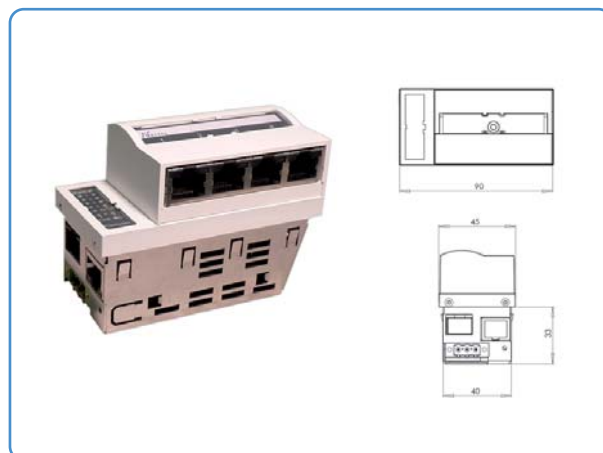


**Reduced maintenance cost!**  
Easy replacement!  
No reconfiguration required!

# GigaSwitch V3 - Installation Switch System

## Very Compact Design (90x45 mm)

The very compact design of the switch system allows a tool-less snap-in installation in standard 45 mm trunking systems or under floor service outlets without special mounting frame!



## Easy Installation

The angled design of the GigaSwitch V3 guarantees a very quick and easy installation of the system! By using the interfaces on the left hand side only, the switch can even be inserted with already connected cables!



## Master Configuration and Firmware Updates

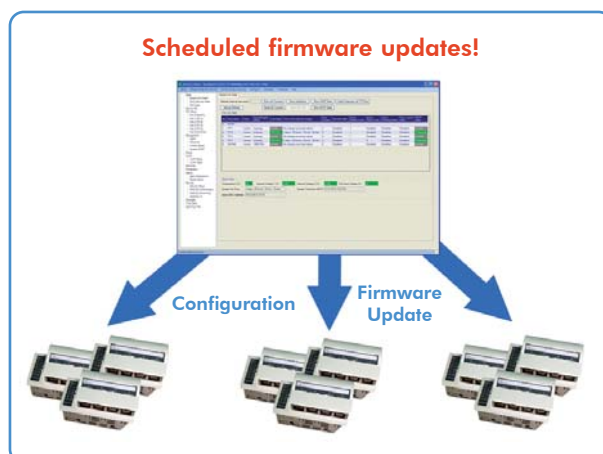
### Master Configurationen

The Nexans switch manager allows to create and distribute switch master configurations easily. Such a master configuration can be used to distribute uniform basic settings to one or more switches of a switch list. It offers the advantage that you can choose which parameters you would like to distribute.

### Firmware Updates

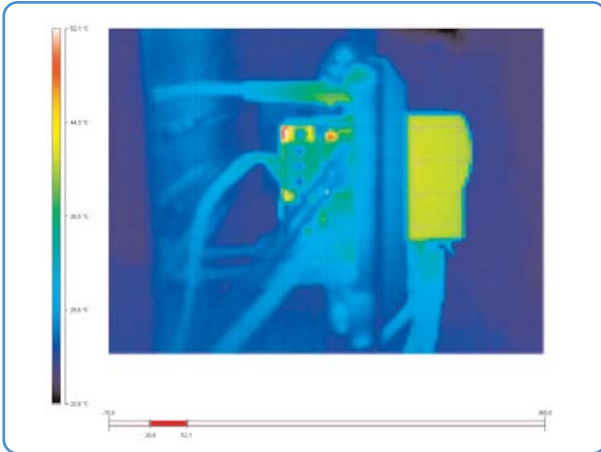
The management of the Nexans iSwitch systems allows a precisely scheduled firmware update of the systems. The network administrator is able to select the most suitable time for the firmware update by simply setting the right date and time.

Registered customers will be provided with new, free of charge firmware updates by e-mail automatically!

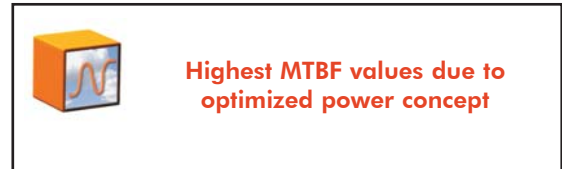


# GigaSwitch V3 - Installation Switch System

## Optimized Power Design



The GigaSwitch V3 has an optimized circuit design to reduce power consumption and heat. Furthermore a thermal coupling of the components with the die-cast aluminium housing provides optimal heat dissipation.



## Manageable Power over Ethernet (PoE/PSE)

The manageable Power over Ethernet (PoE/PSE) feature makes it further possible to power connected IP cameras, WLAN access points, VoIP phones or multifunctional terminals with up to 15,4 W per port directly via the twisted-pair data cable. Power over Ethernet is supported by all 4 RJ45 user ports of each switch system and can be controlled via the switch management for each port of the switch individually.

## Cable diagnostic function

In addition to that, we have implemented a cable diagnostic function which ensures an easy and fast localization of possible faults on the connected Twisted Pair copper cables, too. An identification of short circuits, interruptions, impedance mismatches or reversals can be localized to the meter via this management feature!

## Extensive Security Functions

Nexans Switch systems support all relevant security mechanisms such as IEEE802.1x and MAC-based access control. In connection with a central authentication server, e.g. RADIUS, security in enterprise networks is considerably improved. Maximum security is achieved by access control directly at the user port of the Nexans switch system. Thus the identity of the client is verified directly at the connection point and not only at the bundled port of the central switch.

Any potential abuse of the network connection, e.g. by listening in on traffic, is thus principally excluded.

## Power Supply for Installation Switch Systems



This 48VDC/70W Installation Power Supply has been specially designed for installation inside cable ducts and floor box systems. It ensures a safe and secure operation under these very demanding conditions!

Regular external power supplies should not be used for such applications and manufacturers usually do not take over the risk!

**The 48VDC/70W Installation Power Supply offered by Nexans has got a special MM certification DIN VDE 710 Part 14 and DIN VDE 710 Part 1, i.e. it has been approved for installation on mounting surfaces of wood or materials with unknown inflammation characteristics.**

# GigaSwitch V3 - Installation Switch System

## GigaSwitch V3

- 5/6 Port 10/100/1000 Mbps Switch (depending on version)
- 4x Twisted Pair User Port (10/100/1000 Mbps)
- 4x Power over Ethernet (PSE)
- up to 2x Uplink Ports
- integrated Management
- 48 VDC Power Supply

### Order Numbers:

GigaSwitch V3 TP SFP-I 48V ES3 (Twisted Pair and SFP Uplink) . . . . . 88303851  
 GigaSwitch V3 SFP-I 48V ES3 (SFP Uplink) . . . . . 88303852

Memory Card for GigaSwitch V3 . . . . . 88300691

**All Systems can be used for vertical and horizontal installation.**



## SFP 1000 Pluggable Transceiver (1000 Mbps)

- Gigabit Ethernet
- LC Fiber Optic Connector
- Digital Diagnostic Monitoring Interface

### Order Numbers:

SFP 1000 Pluggable Transceiver GI(LC) E . . . . . 88645879  
 SFP 1000 Pluggable Transceiver SM(LC) E L10 . . . . . 88645870  
 SFP 1000 Pluggable Transceiver SM(LC) E L40 . . . . . 88645876  
 SFP 1000 Pluggable Transceiver SM(LC) E L80 . . . . . 88645877

## SFP 100 Pluggable Transceiver (100 Mbps)

- Fast Ethernet
- LC Fiber Optic Connector
- Digital Diagnostic Monitoring Interface

### Order Numbers:

SFP 100 Pluggable Transceiver GI(LC) E . . . . . 88645896  
 SFP 100 Pluggable Transceiver SM(LC) E L10 . . . . . 88645897  
 SFP 100 Pluggable Transceiver SM(LC) E L40 . . . . . 88645907  
 SFP 100 Pluggable Transceiver SM(LC) E L80 . . . . . 88645908  
 SFP 100 Pluggable Transceiver SF3(SC) E L10 . . . . . 88645902  
 SFP 100 Pluggable Transceiver SF5(SC) E L10 . . . . . 88645903



### Note:

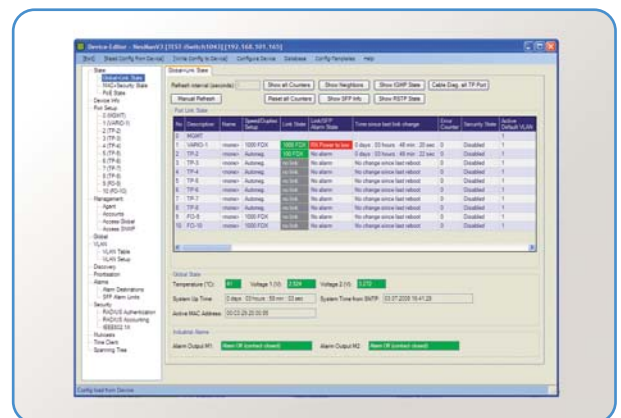
- GI - Graded Index
- SM - Singlemode
- SF3 - Singlemode Single Fiber (TX 1310 nm / RX 1550 nm)
- SF5 - Singlemode Single Fiber (TX 1550 nm / RX 1310 nm)

## Nexans Switch Manager (NexManV3)

- Individual generation of master configurations (also single parameters selectable)
- Storage of configurations in a database (up to 100 history-entries)
- Layer 2 + 3 autodiscovery
- Time for the software update can be preset

### Order Numbers:

NexMan V3 (Single license) . . . . . 88301908  
 NexMan V3 (Company license) . . . . . 88301909





**N**exans network solutions are used throughout the world and have proved their reliability in many different ways. Our customers and references include leading companies in the world, power utilities, railway companies, airports, industrial properties, harbours and waterways. A LAN System which can grow with the needs of its users has to be designed right from the very start with such a level of flexibility to ensure that support is provided in particular with frequent moves, adds and changes.

**With more than 20 years experience in the development and production of optical solutions, the systems from Nexans provide the reliability and the security you expect from your network.**



**Nexans Deutschland GmbH • Active Networking Systems**  
Bonnenbroicher Str. 2-14 • 41238 Moenchengladbach • Germany  
Tel +49 (0) 2166 27-2985 • Fax +49 (0) 2166 27-2499 • E-Mail: [sales.ans@nexans.com](mailto:sales.ans@nexans.com) • [www.nexans.de/ans](http://www.nexans.de/ans)