

GigaSwitch V5 TP SFP-VI 54VDC

Contact

Nexans LANsystems
Telefon: +49 (0) 2166 27 2220
sales.ans@nexans.com

LANactive 6 port managed Full Gigabit FTTO Switch

- 2 uplink ports (1x SFP, 1x TP)
- Power over Ethernet Plus (PoE+), 120Watts
- Efficient energy management
- Memory card slot
- Wide input voltage range 46 ... 57V DC (typ. 54V DC)

Description

The GigaSwitch V5 series enables the secure, switched Gigabit Ethernet networks in the Fiber to the Office (FtTO) environment. The new generation of FTTO switches is equipped with state-of-the-art processor technology with real-time support and provides enhanced performance, security, redundancy and convenient management functionality.

6 port version

The new 6 port switch is a part of the new GigaSwitch V5 series. This special variant with an SFP and Twisted Pair uplink interfaces allows redundant connections of the switches via the RJ45 port on the back side of the switch. The switch ports support link aggregation and provide double bandwidth for data hungry applications.

Snap-In Installation

The very compact design of LANactive devices allows a tool-less snap-in installation into the standard 45 mm cable duct systems or floor boxes without special mounting accessories. FTTO installations can be realized in the shortest possible time in combination with the new Click-In power supply series.

Power Source Equipment (PSE+)

Thanks to the implemented Power over Ethernet (PoE+) functionalities, devices like VoIP-Phones, Wireless-Access-Points and IP-Cameras can be directly supplied with power from the switch according to IEEE802.3at. The Power over Ethernet functionality can be parameterized, controlled and monitored via management.

Memory card

The optional memory card automatically save and storage the complete current configuration and firmware of the device. In addition, each memory card has its own MAC address.

Switch Management with Client Server Architecture

The new management platform allows simple and secure configuration from a centralized location. Rapid Spanning Tree, RADIUS, prioritization, security, LLDP, LACP, IGMP, CDP, QinQ, diagnostics and SNMP traps are just some of the implemented features. In combination with Nexans Device Management software, NEXMAN, a larger number of switches can be managed and monitored at the same time. NEXMAN allows automatic distribution of master configurations and firmware updates.



Made in Germany

LANactive
Switch to the future

NEXMAN
Client/Server Licence

Standards

IEEE 802.3
IEEE 802.3u
IEEE 802.3ab
IEEE 802.3af
IEEE 802.3at
IEEE 802.3z
IEEE 802.3x
IEEE 802.1AB
IEEE 802.1D
IEEE 802.1Q
IEEE 802.1X
IEEE 802.1AX
IEEE 802.3ad



Real-Time OS
Yes



PoE/PoE+
Yes



Compact design
45x90mm



Noiseless
Yes



Fast installation
Yes



Redundancy
Yes



Operating temperature
0 ... 45 °C



Electromagnetic shielding
Yes

Nexans

Characteristics

General

- 6 Port Switch with 1x VARIO SFP and 1xTP Uplinks
- Full Gigabit 10/100/1000 Mbps
- Store and Forward switch, self-learning (Layer-2 switch)
- Support of Jumboframes (9.600 bytes)

Memory card (optional)

- SD Memory card with own MAC-Address
- Backup for switch configuration to memory card and booting for device from memory card

Power supply

- Wide input range 46 ... 57V DC (typ. 54V DC)

Power over Ethernet (PSE+)

- 4x Power over Ethernet (PSE+) according to IEEE 802.3at, 30Watts per port
- Total PoE budget 120Watts per switch

Twisted Pair User interfaces

- rotatable TP module for horizontal or vertical installations
- four RJ45 user interfaces (10/100/1000 Mbps)
- MDI/MDI-X auto-crossover and auto-polarity
- Cable Diagnostic for accurate localization of errors on the twisted pair cable links

Energy management

- EEE - Energy Efficient Ethernet
- ECO Mode for Twisted Pair ports
- managed Power over Ethernet functionality
- time-controlled power management

Mechanics

- Compact housing (90mm x 45mm)
- Suitable for the international 45mm snap-in format
- low installation depth (35mm)

Management hardware platform

- On-Board High-Performance Management for Nexans Switches
- Real-Time Kernel for time-critical applications
- Internal management bus connection via Gigabit
- Dual firmware storage for safe operating and updates
- Switching between firmware versions without corruption

Software Management features (extract)

- Configuration is stored non-volatily in the flash and optionally on the memory card
- SNMP access control, SNMPv1/2
- Global management access control via Access list (ACL) with up to 16 IP ranges
- Up to eight SNMP-trap and Syslog destination IP-addresses with 27 different events types each
- Switch state display and configuration via web browser (HTTP and HTTPS), SNMP, Telnet, SSH
- Management , memory card, PoE and ports state-LED for indication of operating state
- Display of the device information: product name, serial number, date of manufacture, temperature
- Ports autonegotiation or fixed setting of the transfer parameters per TP port
- Error counter per port
- Loop / broadcast limiter for protection against unintended or malicious packet storms
- Prioritization per port possible, 4 output queues per port for prioritization with strict or weighted procedure
- Separate bandwidth limiter per port for Rx and Tx frames
- Support of 256 VLAN-ID's , ID-range: 1-4095
- Port based VLANs
- Frame tagging (trunking) according to IEEE 802.1Q per port can be switched on and off, support for QinQ according to IEEE 802.1ad
- RX/TX and VLAN ports mirroring
- Redundancy with Rapid Spanning Tree, Multiple Spanning Tree, and LACP
- Password protection with two access levels for access via WEB, Telnet / SSH / V.24 and NEXMAN
- Automatic assignment of the IP address via DHCP or fixed setting of the IP address
- Portsecurity via manual setting and by automatic learning of up to three MAC addresses per port
- Portsecurity with authentication of the authorized MAC addresses via RADIUS server
- Portsecurity to IEEE 802.1X with authentication via RADIUS server, IEEE 802.1X transparency
- Telnet / SSH and NEXMAN authentication via RADIUS Server
- Configuration management and storage via Nexans Device Manager (NEXMAN)
- Manual and automatic firmware update with Nexans Device Manager (NEXMAN)
- Automatic loading of switch configuration and of new firmware via DHCP / BootP and command file

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Features

LAN Interfaces

User interfaces (Twisted Pair)	4x 10/100/1000 Mbps
Uplink interfaces (SFP)	1x 100/1000 Mbps
Uplink (Twisted Pair)	1x 10/100/1000 Mbps
Rotatable head module	yes (with monitoring function)

Diagnostic functions (interfaces)

Digital Diagnostics Monitoring Interface	yes
Twisted Pair cable diagnostic	yes

General

Dimensions [BxHxT]	90mm x 45mm x 69mm
Installation depth	35mm
Mounting type	Snap-In
Material	zinc diecasting / stainless steel
Colour	RAL 9010 (pure white)
Ambient temperature	Operation: 0 ... 45 °C, Storage: -20 ... 85 °C
Relative humidity	20 - 90 % (non-condensing)
Weight	290 g
MTBF	> 750.000 h

Power Supply

Input voltage	46 ... 57V DC (typ. 54V DC)
Power consumption(without PoE)	2,8W (standby) ... 4,3W (typ.) ... 5,5W (fully connected)
Connector	3-pin connector with plug-in screw terminal (up to 2.5 mm ²) / (+) (-) (FPE)

Power over Ethernet

Number of PoE ports (front)	4x PSE (PoE+) acc. to IEEE 802.3at
Number of PoE ports (back)	-
PoE Mode	30W per Port, Mode A, Pin 1-2/3-6
max. PoE power budget	120W

Functional parameters

Switching capacity (backplane)	20 Gbps
Data throughput	> 1.400.000 Packets/sec. per port (FDX, bidirectional)
Switching procedure	Store and forward, self-learning
Max. frame size	9.600 bytes (Support of Jumbo frames)
Storage capacity	8.192 MAC-Addresses

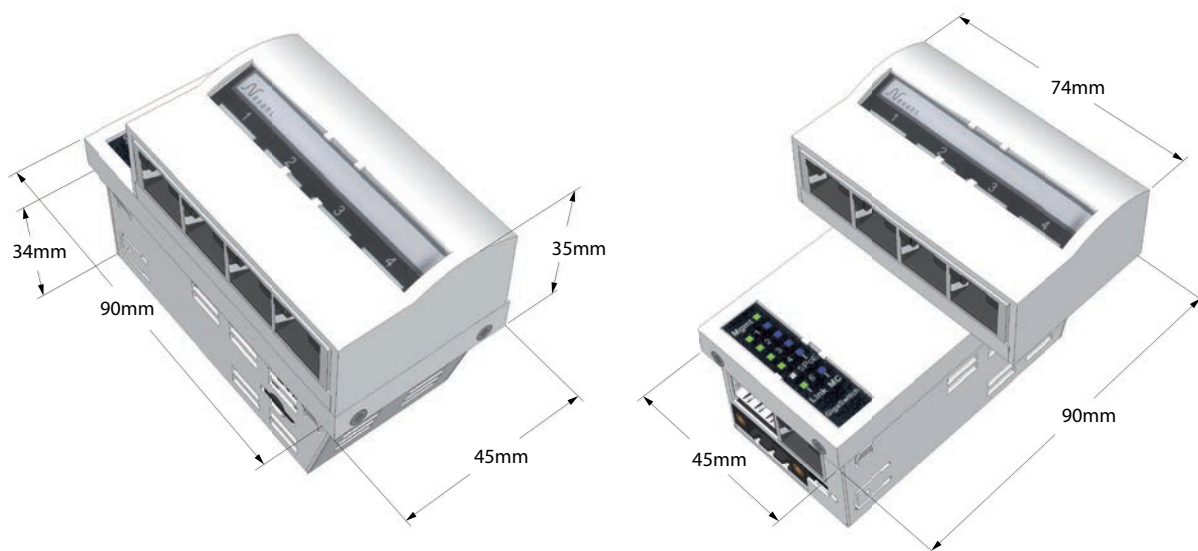
Management

	On-Board High-Performance management
Hardware	Real-time management platform V5
Memory	128 MByte RAM, 16 MByte NOR FLASH, 256 MByte NAND FLASH
Ethernet connection to processor	1Gbps
Firmware update	Update in separated FLASH domain, corruption impossible
FLASH configuration	Dual configuration, corruption impossible
SCP, SSH, HTTPS and SNMPv3	yes
Configuration button	yes (configuration button deactivatable)
Reset button	yes (configuration button deactivatable)
Memory card	Memory Card with fixed MAC-Address for redundant storage of the complete switch configuration (option)
Console port (V.24)	yes
Function entry contact	Free programmable function input with alarm functionality

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Dimensions



Order Numbers

FTTO Switch

GigaSwitch V5 TP SFP-VI 54VDC	88303955
Memory Card for GigaSwitch	88300691
Memory Card for GigaSwitch (integrated)	88300693

Installation Power Supplies

Installation Power Supply 54VDC/65W	88646066
Power Supply with Schuko 54VDC/65W	88646077
Click-In Power Supply 54VDC/70W 90x45	88646200
Click-In Power Supply 54VDC/130W 135x45	88646240

Installation sets

Cover set 45x90 incl. MF, PW/9010 80x150	88646030
Cover 82x153/45x90 Legrand, white, horizontal	88646031
Universal support for Legrand cover 82x153	88646032

SFP Modules 1000 Mbps

Nexans SFP 1000 Transceiver GI(LC)E .	88646015
Nexans SFP 1000 Transceiver SM(LC)E L10	88646016
Nexans SFP 1000 Transceiver SF3(LC)E L10	88646073
Nexans SFP 1000 Transceiver SF5(LC)E L10	88646075

SFP Modules 100 Mbps

Nexans SFP 100 Transceiver GI(LC)E	88646010
Nexans SFP 100 Transceiver SM(LC)E L10	88646011

NEXMAN Device Manager - Nexans Management Software

NEXMAN Device Manager Evaluation Version	free of charge/download
NEXMAN Device Manager Single Licence	88301908
NEXMAN Device Manager Company Licence	88301909
NEXMAN Device Manager Client-Server Licence	88301920