

GigaSwitch 641 Desk V5 SFP-VI

Contact

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LANactive 6 port managed Full Gigabit FTTO Desk 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 Fibre 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 interface 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.

Compact design

The very compact and fan-less design of the switch allows easy positioning and integration of systems in and on desks, columns and walls. The switches are supplied flexibly via external compact power supply units. Central and decentral power supply concepts with different PoE power classes between 60 and 120 watts can be selected, also redundant.

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
148x24x118mm



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

- 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

Mechanics

- Compact housing (148x24x118mm)
- Fan-less design
- Wall mounting with installation kits

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)

- Modular respectively On-Board high-performance management for Nexans switches
- Configuration management and archiving via Nexans Switch Manager (NEXMAN)
- Manual and automatic firmware update via Nexans Switch Manager (NEXMAN)
- Automatic loading of a switch configuration via DHCP/BootP option
- Automatic loading of a new firmware via DHCP/BootP and command file
- Password protection using two access levels for access via WEB, Telnet/SSH/V.24 and NEXMAN
- Automatic IP address allocation via DHCP or fixed IP address
- Global management access protection via access list and up to 16 IP ranges
- Management Status-LED to display operating state
- Configuration is stored permanently in flash
- Display of product data such as product name, serial number, manufacturing date, temperature, etc.
- Ports can be enabled/disabled
- Autonegotiation or fixed setting of transmission parameters for each TP port
- Error counter per port for detection of incorrect duplex settings
- Support of 256 VLAN IDs in the range from 1 to 4095
- Untagged Default-VLAN can be set for each port
- Frame tagging (trunking) in accordance with IEEE 802.1q selectable for each port
- Ports can simultaneously process tagged and untagged frames
- Prioritisation possible for each port
- Four output queues per port for Prioritisation weighting using strict or weighted fair queuing
- Bandwidth limitation can be set separately per port for Rx and Tx frames
- Portsecurity via manual definition of up to three MAC addresses per port
- Portsecurity via automatic learning of up to three MAC addresses per port
- Loop/broadcast limiter for protection against inadvertent or malicious packet storms
- Switch state display and configuration via web browser (HTTP and HTTPS)
- Password protection using two access levels (R/W or R/O) for access via web browser
- Switch state display and configuration via SNMPv1/v2/v3 and CLI (SSH, TELNET, V.24)
- Password protection using two access levels (R/W or R/O) for access via Telnet
- Eight SNMP trap and Syslog destination IP addresses selectable, each with 30 different event types
- CLI and NexMan authentication via RADIUS server
- Portsecurity with authentication of the authorized MAC addresses via RADIUS server
- Portsecurity according to IEEE802.1X with authentication via RADIUS server
- Redundancy via Rapid Spanning Tree, Multiple Spanning Tree or Media Redundancy Protocol

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Features

Ordering information

Article number 88303652

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

Port LED display yes (on switch front)

Diagnostic functions (interfaces)

Digital Diagnostics Monitoring Interface yes

Twisted Pair cable diagnostic yes

General

Dimensions [WxHxD] 148mm x 24mm x 118mm

Installation depth 24mm

Mounting type Desk or on-wall mounting

Material Metal case, with Kensington security lock

Colour RAL 9010 (pure white)

Ambient temperature Operation: 0 ... 45 °C, Storage: -20 ... 85 °C

Relative humidity 20 - 90 % (non-condensing)

Weight 550 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 mm²) / (+) (-) (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 with ext. PS 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

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Dimensions

