

# GigaSwitch 64x Desk V5 Series

## Contact

Nexans LAN Systems  
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## LANactive 6 Port Managed Full Gigabit FTTO Desk Switch

- 2 Uplink Ports (1x SFP, 1x TP or 2x SFP)
- Power over Ethernet (PoE+), up to 120W
- Efficient Energy Management
- Memory Card Slot
- Wide input voltage range 46...57V DC



## Description

Nexans LANactive GigaSwitch 64x Desk series enables the secure, switched Gigabit Ethernet networks in the Fibre to the Office (FTTO) environment. The latest 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.

  
Made in Germany

### 6 port version

The 6 port GigaSwitch is a part of the latest 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 version with two SFP ports supports link aggregation for providing double bandwidth up to 2Gbps.

### 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 GigaSwitch is powered via an external compact power supply unit.

### 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 and Zero-Touch Configuration

Nexans LANactive Manager allows a simple and secure configuration of all device parameter of the GigaSwitch series. With the LANactive Manager a larger number of GigaSwitches can be managed and monitored at the same time. In combination with Nexans Zero-Touch Configuration, the LANactive Manager allows automatic distribution of configurations and firmware updates. A pre-configuration of the switches is not necessary.

## 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



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## Hardware Features

Ordering Information	GigaSwitch 641 Desk V5 SFP-VI	GigaSwitch 642 Desk V5 SFP-2VI
Article Number	88303652	88303653
<b>Interfaces</b>		
User Ports (RJ45)	4x 1000Base-T	
Uplink Ports (SFP)	1x 100/1000Mbps	2x 100/1000Mbps
Uplink Ports (RJ45)	1x 1000Base-T	-
Twisted Pair Ports	Auto-Negotiation, MDI/MDI-X Auto-Cross Over and Auto-Polarity	
Digital Diagnostics Monitoring Interface	Yes	
Twisted Pair Cable Diagnostic	Yes	
<b>Power over Ethernet</b>		
Number of PoE User Ports	4x PSE (PoE+) acc. To IEEE 802.3at	
Number of PoE Uplink Ports	-	
PoE Mode	30W per Port, Mode A, Pin 1-2/3-6	
Max. PoE power budget	120W	
<b>General</b>		
Dimensions [W x H x D]	148mm x 24mm x 118mm	
Material	Metal case	
Colour	Pure White, like RAL 9010	
Ambient Temperature	Operation: 0 ... 45°C, Storage: -20 ... 85°C	
Relative Humidity	20 - 90% (non-condensing)	
Weight	550g	
MTBF	> 750,000h	
<b>Power Supply</b>		
Input Voltage	46...57V DC (typ. 54V DC)	
Power Consumption	5.3W typ., 6.0W max.	
Heat Output	21Btu(IT)/h	
Connector	3-pin connector with plug-in screw terminal (up to 2.5mm <sup>2</sup> ) / (+) (-) (FPE)	
<b>CE - Conformity</b>		
Electro Magnetic Capability Directive	2014/30/EU	
Low Voltage Directive	-	
RoHS 2	2011/65/EU	
Engineering Standards	EN 62368-1, EN 55032, EN 55024, EN 50581	

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## Software Features

### Switching Parameters

Switching Type	Store-and-Forward, self-learning
Switching Capacity	20Gbps, non-blocking
Packet Forwarding Rate	2x 1.488Mpps per port
Max. Frame Size	9.600Bytes (Support of Jumbo frames)
Packet Buffer	512kBytes
Latency (RFC1242)	100Mbps / 64Byte (FIFO/LIFO) 9µs / 9.3µs 100Mbps / 1518Byte (FIFO/LIFO) 125µs / 4µs 1000Mbps / 64Byte (FIFO/LIFO) 2.7µs / 2.2µs 1000Mbps / 1518Byte (FIFO/LIFO) 15µs / 2.5µs
MAC-Address Table	8.192 MAC-Addresses
VLANs	IEEE802.1q with up to 256 Groups
Quality of Service Layer 2	IEEE802.1p Class of Service (4 Queues per Port)
Quality of Service Layer 3	RFC2474/3168 DSCP (4 Queues per Port)
Bandwidth Limitation	Bitrate
Energy Efficient Ethernet	IEEE802.3az
Flow Control	IEEE802.3x
Fabric Attach	Basic Fabric Attach Client Support

### Management

LEDs	On-Board High-Performance Management
Zero-Touch Configuration	Management, Port Status and Activity, Memory Card
IP-Address	Via LANactive Manager Controller
DHCP-Client	IPv4, IPv6
DHCP Relay Agent	DHCP, DHCPv6
File Transfer	Yes
Console Port	TFTP, SCP
Web-Interface	V.24 with Nexans Console Cable
Command Line Interface	HTTP, HTTPS
Scripting	SSH, Telnet, V.24
SNMP	Yes
Syslog	SNMPv1, v2c, v3
Discovery Protocols	Yes
Time Synchronisation	LLDP (IEEE802.1AB), LLDP-MED (ANSI/TIA-1057), CDP
Port Statistics	SNTF
	Detailed per Port

### Redundancy

Redundancy Protocols	STP, RSTP, MSTP, MRP
Link Aggregation	LACP

### Security

Password Protection	Two Access Levels (R/W or R/O)
Authentication via Radius and TACACS+	CLI and LANactive Manager
Access Control List (ACL)	Layer 2 and Layer 3
ACL for Management Interface	Up to 16 Access Control Lists
Portsecurity via MAC-Address	Up to 3 predefined MAC-Addresses
Portsecurity via Radius	IEEE802.1x with MAC Bypass
DHCP Snooping	Yes
Loop and Broadcast Limiter	Yes
Firmware Update	Dual Firmware Image
Configuration-/Reset Button	Yes / Yes
Memory Card	micro SD-Card, optionally with fixed MAC-Address



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## Dimensions

