RY-LPITE-804GBTME

Industrial L2/L3 Switch with management, PoE+ and PoE++ and DMS



- Top hat rail mounting
- Copper ports: 8x10/100/1000TX, RJ45
- 4 ports with PoE, PoE+ et PoE++
- Optical fibre ports: 4x100/1000MBit/s SFP

- Managed, Layer 2/3, redundant, DMS
- Power supply 48-57VDC, redundant
- IEC 61850 Communication networks and systems for power utility automation

This series includes high quality switches of robust construction for the implementation of powerful 10, 100 and 1000MBit/s Ethernet ring structures as per IEEE802.x. All eight copper ports are with Power over Ethernet PoE and PoE+. These switches are especially suitable for video networks. By way of two or more connections, the switch enables the construction of one or more fault-tolerant optical fiber rings. In case of an interruption the rings close automatically in less than 50ms, which improves the availability of the system. There are four SFP slots for the backbone for 100/1000BaseSX/LX/ZX which can be implemented for multimode or singlemode. The switches can also be used as single devices, for point-to-point connections or as connection modules. The extended possibilities of the management software enable the use of the switch in high demanding network systems. Easy top hat rail mounting. Normed plugs (RJ45 resp. LC) ensure all electrical and optical connections.

Video network special features

Active monitoring of the camera
Switch-powered cameras by PoE are constantly monitored. In case of a camera failure the switch automatically restarts the camera. If this is not possible the switch alarms by SNMP.

Active monitoring PoE-supply
The switch alarms by SNMP in case of sudden excessive power consumption by a defect camera for example.

Active management of the PoE-performance
The PoE-ports can be started by time intervals so as to prevent an overload of the PoE power supplies.

Further video-friendly features:
Extra high backplane performance for a smooth video transmission with all ports assigned. Support of Jumbo

Frames up to 9600Bytes by 100MBit/s. MAC-address restriction ensures port security.

More information

Special features	USB-config-port: For FW-Update, backup, restore, boot up and syslog, USB2.0 A-Typ

DMS

DMS (Device Management System)

This switch disposes of an integrated network monitoring and control system which gives the user a good overview over the whole network in an easy way. This DMS-system has the following qualities:

Graphical network map
The network map gives a quick overview over all switches and terminal devices such as IP-cameras or servers indicating the IP-address, type of device and equipment. Plans and maps can be saved as background pictures and thus enable the user to access to certain devices without knowledge of the entire IP-structure.

Device search
This function enables the access to a specific device also in large networks. Recently added devices, as per example a new IP-camera, are immediately displayed and thus enable a direct access.

Data traffic display
Graphical display of data traffic per port in a time axis.

Error handling and security
Network diagnosis between master switch and terminal devices. Protective mechanisms such as data flow restriction guarantee an effective protection against inadvertent access. IEEE802.3ah and IEEE802.1ag provide tools for structuring of networks.

Technical data

General properties

supply voltage	48-57VDC, redundant supply is possible, screw terminal PoE+ and PoE++ a minimum of 54VDC power supply is required
power consumption	15W max (without PoE)
MTBF	25°C: 494'255h 75°C: 99'723h
operating temperature	-40°C to +75°C Rel. humidity: 5% to 95%, non-condensing
dimensions	135x62x130mm (HxWxL)
weight	0,7kg
Testing standards	EMV: IEC61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8 EMI: FCC Part 15 Class A, EN61000-3-2, -3-3, -6-4, EN55022, EN55011 Free fall: IEC60068-2-32 Shock: IEC60068-2-27 Vibration: IEC60068-2-6 Railway standard: EN0121-4, EN50155 Transport: NEMA TS2 Substation: IEC61850-3, IEEE1613 Marine: DNV

interfaces

copper ports	8 x 10/100/1000TX Port 1-4 with PoE, PoE+ and PoE++ Maximum PoE performance: 240W
optical fibre ports	4 x 100/1000, SFP We recommend the use of our barox SFPs. We do not test or guarantee the compatibility of our devices with SFPs of other manufacturers.
console port	RS232, 115,2kBit/s, 8, N, 1, RJ45

network properties

backplane	24 GBit/s
MAC-table	8k
configuration	Console, Webserver, Telnet, CLI, SNMP v1/v2/v3, TFTP, SSH, SSL, RMON, USB
PoE Management	
port settings	As per port: Port disable/enable, auto negotiation 10/100/1000, full- & halfduplex, flow control disable/enable, data rate
port status	As per port: Data rate, duplex, link, flow control, auto negotiation, trunk
layer3 functions	IPv4 and IPv6 Unicast: static routing
VLAN	max. 64 VLAN ID & 802.1Q VLAN & Port Based
link aggregation	02.3ad LACP, static trunk, 12 groups with 16 ports
QoS	Class of Service IEEE 802.1p per port 8 priorities
security	FCC Class A, CE, SSH v1 and v2, SSL for GUI User authentication with private key
multicast	IGMP v1, v2, v3 MVR, Multicast VLAN registration
standards	802.3, 10Base-T Ethernet 802.3u, 100BaseTX and 100BaseFX Fast Ethernet 802.3ab, 1000Base-T 802.3z, 1000Base-X 802.3x, Flow Control und Back Pressure 802.1d, Spanning Tree 802.1w Rapid Spanning Tree 802.1s, Multiple Spanning Tree ITU-TG.8032 / Y.1344 Ethernet Ring Protection Switch 802.3ad, Port Trunk mit LACP 802.3af Power over Ethernet 802.3at Power over Ethernet PoE+ 802.1p, Class of Service 802.1q, VLAN Tag 802.1x, User Authentication (RADIUS) 802.1ab LLDP ITU-T G.8031 Ethernet Linear Protection Switching ITU-T G.8032 Ethernet Ring Protection Switching IEC 61850 Communication networks and systems for power utility automation

Product variants

	RY-LPITE-804GBTME	without SFPs without power supply

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