

RY-804GBTME

Industrial L2/L3 Switch with management, DMS

- Top hat rail mounting
- Copper ports: 8x10/100/1000TX, RJ45
- Optical fibre ports: 4 x 100/1000 MBit/s SFP
- with management, Layer 2/3, ring redundant, DMS
- PTP, IEEE1588 v2
- Power supply 12-50VDC



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. 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

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

Spezielle Eigenschaften	USB-config-port: For FW-update, backup, restore, boot up and syslog, USB2.0 A-Typ
System notes	The switch supports PTP, precision time protocol according to IEEE1588 v2 and IEC 61588, a feature used in industrial automation, professional audio-video applications for audio-video bridging and telecommunications, among others.



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	12-50VDC, redundant supply is possible, screw terminal
power consumption	15W max.
MTBF	25°C: 951'258h 75°C: 193'332h
operating temperature	-40°C to +75°C
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
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- & half duplex, flow control disable/enable, data rate
port status	As per Port: Data rate, duplex, link, flow control, auto negotiation, trunk
VLAN	max. 64 VLAN ID & 802.1Q VLAN & port based
link aggregation	802.3ad LACP, static trunk, 12 groups with 16 ports
QoS	Class of service IEEE 802.1p per port 8 priorities
security	FCC Class A, CE, UL
	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

802.1p, Class of Service

802.1q, VLAN Tag

802.1x, User Authentication (RADIUS)

802.1ab LLDP

IEEE1588v2, PTP



Product variants

RY-804GBTME

without SFPs
without supply

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