RY-LPIGE-602GBTME

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



- DIN rail mounting
- Copper ports: 6x10/100/1000TX, RJ45, of which 4xPoE/PoE+
- Optical fibre ports: 2 x 100/1000 MBit/s SFP
- Managed, Layer 2/3, ring redundant
- IEEE 1588 V2, PTP
- Power supply 48-57VDC, redundant

The series includes robust, high-quality switches for the implementation of powerful 10, 100 and 1000MBit/s Ethernet ring network structures according to IEEE802.x. All six copper ports feature Power over Ethernet with PoE and PoE+. These devices are specifically designed for video networking. The switch allows one or more fault-tolerant fiber optic rings to be built via two or more ports.

In the event of an interruption, the ring closes automatically in less than 50ms. This increases the availability of the system. Two SFP bays for 100/1000BaseSX/LX/ZX are available for the backbone, which can be equipped either for multimode or singlemode. The switches can also be used as stand-alone devices, for point-to-point connections or as connection modules. The extensive possibilities of the management software also allow the use of the switches in systems with high demands on the functionality of the network. Installation is very quick and easy thanks to the mounting device for mounting rails. The electrical and optical connections are ensured by standardized plugs (RJ45 or LC).

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.

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More information

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

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Technical data

General properties

supply voltage	48-57VDC, redundant supply is possible, screw terminal
power consumption	Max. 15W (without PoE)
MTBF	**25°C: 527'730h** **75°C: 100'874h**
operating temperature	-40°C ... +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: EN50121-4, EN50155 Transport: NEMA TS2

interfaces

copper ports	6 x 10/100/1000TX, 4 x PoE, PoE+ 802.3af/at Maximum PoE performance for all ports: 120W
optical fibre ports	2 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	Webserver, Telnet, CLI, SNMP v1/v2/v3, TFTP, SSH, SSL, RMON, USB
PoE Management	
port settings	Per Port: Port disable/enable, Auto negotiation 10/100/1000, Full- & halfduplex, Flow Control disable/enable, data rate
port status	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 Gruppen à 16-Ports
QoS	Class of Service IEEE 802.1p per port 8 Prioritäten
security	FCC Class A, CE, UL SSH v1 und v2, SSL für GUI User authentication with private key
multicast	IGMP v1, v2, v3 MVR, Multicast VLAN Registration
standards	802.3, 10Base-T Ethernet 802.3u, 100BaseTX und 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 IEEE 1588 V2, PTP

Product variants

	RY-LPIGE-602GBTME	6x10/100/1000TX, PoE, PoE+ 2x100/1000SFP without SFPs, wothout power supply

Version 13.11.2023, Changes without notice

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