

# RY-LGSP23-10G

19"-Switch with management and PoE +

- 19" Switch L2/L3 with PoE+
- Copper ports: 10x10/100/1000TX
- Optical-fibre ports: 2xSFP 100/1000Mbit/s (Combo)
- With management, ring-capable, functions I 3
- Fanless
- Power supply 230VAC



Being developed for tasks with high data volume, this layer 2/3 switch with L3 fonctions is suitable for example for video over IP and video streaming in connection with multicast as well. IP-cameras are supplied by PoE through the data cable. Its compact design and reduced number of ports make this switch ideal for smaller plants or as a remote unit in a larger network. With its extensive management possibilities, it is also suitable for complex network structures.

## 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.

### 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.

#### **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	100-240VAC, 50-60Hz	
power consumption	Max. 40W (witout PoE) / 170W (with PoE)	
MTBF	25°C: 590'225h 40°C: 356'296h	
operating temperature	0°C to 40°C	
dimensions	220 x 243 x 44mm (width × depth × height)	

### interfaces

copper ports	8 x 10/100/1000TX, PoE+, RJ45 Maximum PoE power for all ports: 130W
optical fibre ports	2 x 100/1000, SFP or 10/100/1000TX, RJ45 (Combo) 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	1 x RS232, RJ45

## network properties



backplane	20GBit/s	
MAC-table	32k	
configuration	Console, Web GUI, SNMPv1, v2c and v3	
PoE Management		
port settings	Port disable/enable. Auto-negotiation 10/100/1000Mbps. Flow Control disable/enable. Data rate control on every port. Max. framesize, power control	
port status	Display per port: Speed link status, flow control status. Auto negotiation status, trunk status.	
layer3 functions	IPv4 and IPv6 Unicast: static routing	
VLAN	802.1Q Tagged based VLAN, up tp 255 VLAN-groups, Q-in-Q, private VLAN	
link aggregation	IEEE 802.3ad LACP / Static Trunk, 18 groups of 8-port trunks or static trunk	
QoS	Traffic classification based, strict priority and WRR, 4-level priority for switching	
	- Port number	
	- 802.1p priority- DS/TOS field in IP package	
security	SSH, SSL, 802.1X RADIUS, Port Security, ACL with MAC, IP, MUlticast etc. User authentication with private key	
multicast	IGMP v1/v2/v3 snooping, up to 1024 multicast groups, source-specific multicast, IGMP Proxy	
topology	STP, RSTP, MSTP	



#### standards

IEEE 802.3 10Base-T

IEEE 802.3u 100Base-TX/100BASE-FX

IEEE 802.3z Gigabit SX/LX

IEEE 802.3ab Gigabit 1000T

IEEE 802.3x Flow Control and Back pressure

IEEE 802.3ad Port trunk with LACP

IEEE 802.1d Spanning tree protocol

IEEE 802.1w Rapid spanning tree protocol

IEEE 802.1s Multiple spanning tree protocol

IEEE 802.1p Class of service

IEEE 802.1Q VLAN Tagging

IEEE 802.1x Port Authentication Network Control

IEEE 802.1ab LLDP

IEEE 802.3af/at Power over Ethernet

IEEE 802.az Energy Efficient Ethernet



# **Product variants**

RY-LGSP23-10G	
RY-19"-Winkel	Pair of brackets for the mounting of TY-GSP23-10G in a 19"-frame Included

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