RY-LGSO25-28, Layer-2/3 optical IP-switch 24 optical ports and four 10G UpLinks

# General description

## Short description

## Optical Gigabit IP switch, Layer 2/3 with 24 optical ports 100/1000-SFP, four UpLink ports for 1G/10G-SFP, manageable

## Special features

* DMS (Device Management System), the switch has an integrated network monitoring and control system, which gives the user a good overview of the entire network in a very simple way.
* High network security
* Four ports for 10G UpLinks
* High backplane performance
* Layer3, static routing

# Special features for video networks

* **Active integration of the switch in video management systems**  
  For the popular video management systems Milestone and Siveillance Video, SW modules are available which allow direct integration of the switch management and the DMS into this VMS
* **Jumbo frames even at 100 Mbps**  
  Jumbo Frames up to 9'600Bytes are also supported at 100MBit/s.

# Device Management System DMS

**The switch has an integrated network management system with which the following functions are possible:**

* **Dynamic schematic representation of the network**
* **The whole network is shown schematically. All switches, servers and end devices are shown individually. The representation can be switched between a schematic view and a tabular view.**
* **All displays can be exported as snapshot.**
* **Display of the IP addresses of all network and end devices.**
* **Display of the device type, switch, IP camera, server, etc.**
* **Simultaneous upload of new firmware via the DMS of all identical switches in the network.**
* **Analysis of the data cables connected to the switch**

# Safety features

* **Certified authentication HTTPS  
  It must be possible to install a private HTTPS key for management access.**
* **User management  
  The rights of the users must be freely adjustable on at least 15, freely adjustable levels.**
* **MAC address table  
  It must be possible to manage the MAC table automatically and manually. Static entries must be possible.**
* **ARP table  
  The ARP must be able to be managed dynamically and statically. It must be possible to convert a dynamically created table into a static one.**
* **IP source guard  
  The machine must be capable of checking the MAC address in combination with the IP address.**
* **Private VLANs  
  It must be possible to separate terminal devices within a VLAN with private VLANs.**
* **ACL access control  
  It must be possible to define rules and conditions for incoming packets per port. The rules must be able to operate according to either the authorisation or the exclusion procedure. Filtering can be based on source and destination addressing and includes MAC, IP and VLAN ID.**
* **RADIUS and TACACS+ authentication  
  Authorisation and billing. MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions. Supports IGMP-RADIUS based 802.1X. Dynamic VLAN assignment**

# Technical specification

### **Port list**

Optical ports 24 SFP-slots for SFP (Mini GBIC) for the following interfaces:  
1000BaseSX (Gigabit Multimode)  
1000BaseLX (Gigabit Singlemode)  
1000BaseLX bidi (Gigabit Singlemode only one fibre)  
100BaseFX Multimde for one or two fibres  
100BaseFX Singlemode for one or two fibres

Electrical ports 4 x 10/100/1000BaseTX (RJ45), combo with 4 of the mentioned SFP-ports

UpLink ports 4 x 1G/10G SFP/SFP+ slots

Console port RS232, CLI, DB9 connector

### **Hardware**

Architecture Store and forward

Switch Backplane min. 128GBit/s

MAC adresses 32K

Jumbo Frame 9600kBytes

### **Management**

System configuration Web Browser, DMS, console CLI, SNMPv1, v2c and v3 (USM), http, HTTPS, Telnet  
It must be possible to lock individual configuration methods.

Port configuration Port disable/enable. Auto-negotiation 10/100/1000Mbps. Flow Control disable/enable. Data rate control on each port. Max. framesize.

Port status Display per port Speed Link Status, Flow Control Status. Auto negotiation status, trunk status.

VLAN 802.1Q Tagged Based VLAN ,up to 255 VLAN groups, Q-in-Q, private VLAN

Link Aggregation IEEE 802.3ad LACP / Static Trunk, supports 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 Packet

IGMP Snooping IGMP (v1/v2/v3) Snooping, up to 256K multicast groups, IGMP Querier mode support, MLD v1/v2, Proxy

Access Control list IP-Based ACL/MAC-Based ACL, 256 entries, VLAN ID, u.v.a.

SNMP MIBs v1, v2c and v3 with fortraps

### **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.az Energy Efficient Ethernet

**Electrical and thermal values**

Power voltage 110 – 240VAC 50/60Hz  
48VDC, redundant power input

Power need 30W

Operating temperature: 0°C to +50°C

Storing temperature: -20°C to +70°C

Humidity: 20% to 95% relative humidity non-condensing

**Manufacturer** barox Kommunikation