

## SYRIUSZ

- 3-port Gigabit Ethernet switch with Energy Efficient Ethernet (EEE) support
- 802.1Q VLAN support for 4096 VLAN IDs,
- Egress tagging/untagging selectable per port or by 802.Q VLAN ID
- Supports multiple provider ports within a single chip via programmable per port based VLANs
  - 'Best-in-Class' per port TCP/IP Ingress Rate Limiting along with independent Storm Prevention
- 5 Ingress Rate Limiting bucket per port, Rate-based and Priority based rate limiting
- Non-Rate Limited frames based on SA or DA
  - QoS support with four traffic classes, QoS determined by Port, 802.1p tagged frames, IPv4 TOS & DS, 802.1q VID or source/destination MAC address
  - Egress Rate shaping on all ports and all queues per port
  - True non-blocking switching performance, wire speed performance with Maximum Frame size up to 10K Bytes,
  - 8K unicast or multicast MAC address entries, per port, programmable MAC hardware address learn limiting
  - SNMP, WWW, TELNET management, SMTP, SNTP, Syslog support
  - Optional PoE technology support on single RJ45 port, possibility to power external device using Ethernet cabling
  - Power supply redundancy
  - Optional control and measurement functions (1-wire interface, digital outputs and inputs)

**SYRIUSZ** is a three-port 10/100/1000 Mbit/s Ethernet switch equipped with two electrical and one optical interface (realized by SFP module). **SYRIUSZ** device supports Energy Efficient Ethernet functionality (IEEE 802.3az) allowing for less power consumption by putting Ethernet ports into "sleep" mode during periods of low data activity and adjusting the power accordingly to Ethernet cable length.

Ethernet transmission channel may be divided into independent transmission channels through the virtual VLAN mechanism. Up to 64 independent VLANs are supported. Multiple provider ports with programmable Ethertype can be created. Device supports programmable ingress rate limiting (5 ingress Rate limiting buckets per port, supporting Rate-based and Priority based rate limiting) and port priority setting (depending on default port priority, VLAN priority, IP DSCP/TOS field or MAC destination/source address). Egress Rate shaping can be configured on all ports and all queues per port. Switch supports up to 8096 MAC addresses and up to 10K jumbo frames.

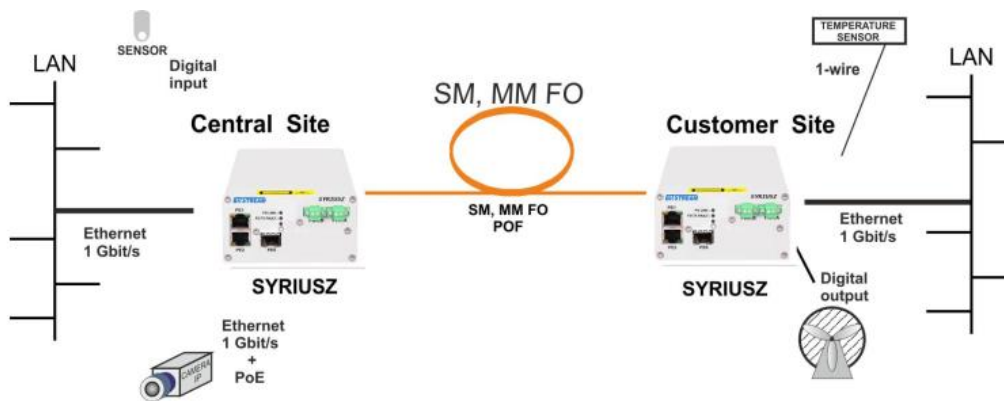
Embedded HTTP server, TELNET server and SNMP agent allows free configuration of the device performance by standard Web browser and continuous monitoring from any management platforms equipped with SNMP client. In addition, built-in SMTP service daemon allows to notify the operator in case of system failure. Remote software update is supported to allow further functionality improving.

In addition to typical switch functionality **SYRIUSZ-CEN** version of the device is able to realise control and measurement functions. 1-Wire Interface can be used to connect external (temperature, humidity) sensors.

Digital input allows to control event of violation of the facility's space, flooding etc. **SYRIUSZ-CEN** also enables remote control of device placed in the monitored facility by means of embedded type "relay contact" output. **SYRIUSZ-PoE** version of the device supports PoE technology on single RJ45 port and therefore can provide power through twisted pair.

**SYRIUSZ** switch is powered from DC voltage from 12 to 60V power supply or from an external device attached to, in the case of AC voltage. **SYRIUSZ** is equipped with redundant power supplies, so that in the event of one power supply failing, other power supply is able to power the device.

A standard application is presented on the drawing below:



PARAMETERS	
<p><b>Electrical Ethernet ports</b></p> <ul style="list-style-type: none"> <li>• Energy Efficient Ethernet 802.3az support</li> <li>• 10/100/1000 Mbit/s transmission speed</li> <li>• Flow control function</li> <li>• „Autocrossover” MDI, MDI-X function</li> <li>• Supports VLAN/multiple VLAN, IEEE 802.1q,QinQ</li> <li>• Proper connection signalling</li> <li>• 2x RJ-45 connectors</li> <li>• Single Ethernet port with optional PoE technology support</li> </ul>	<p><b>Optical Ethernet ports</b></p> <ul style="list-style-type: none"> <li>• 1x SFP module</li> <li>• 100Base-FX and 1000BASE-X support</li> </ul>
<p><b>1-wire interface (optional)</b></p> <ul style="list-style-type: none"> <li>• Transmission speed:0-16,3 bit/s</li> <li>• Range &lt; 100m</li> <li>• Connector: RJ-12</li> </ul>	<p><b>Output contact (optional)</b></p> <ul style="list-style-type: none"> <li>• Maximum working DC voltage – AC250V / DC 30V</li> <li>• Maximum switched DC current – 5A DC</li> <li>• Dedicated connection of external auxiliary relays</li> <li>• Optionally galvanically insulated</li> </ul>
<p><b>Input contact (optional)</b></p> <ul style="list-style-type: none"> <li>• Type – short-circuit, open-circuit detection</li> <li>• Galvanically insulated</li> </ul>	<p><b>Power over Ethernet (optional)</b></p> <ul style="list-style-type: none"> <li>• Supply voltage range: 24 to 57V DC</li> <li>• Maximum power delivered by twisted pair – 25W</li> </ul>

**Dimensions**

- Housing 103 x 120 x 53mm
- Suitable for mounting on DIN rail
- Weight <1kg

**Power Supply**

- Supply voltage range: 12 to 60V DC
- External power supply included 230VAC/48VDC
- Power supply redundancy

**ORDERING**

<b>SPECIFICATION</b>	<b>DESCRIPTION</b>
<b>SYRIUSZ</b>	<u>3-Port Gigabit Ethernet switch with 1 SFP port</u>
<b>SYRIUSZ-CEN</b>	<u>3-Port Gigabit Ethernet switch with 1 SFP port and control and measurement functions</u>
<b>SYRIUSZ-PoE</b>	<u>3-Port Gigabit Ethernet switch with 1 SFP port and PoE support</u>
<b>SYRIUSZ-CEN-PoE</b>	<u>3-Port Gigabit Ethernet switch with 1 SFP port, PoE support and control and measurement functions</u>

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