Rugged managed 10 & 19 port Gbit Switch for DIN-Rail or Flange mounting

General Description

The µMAGBES Family is a 10 & 19 port manageable Gigabit Ethernet switch of the 4th generation of MPL switches. The robust design, low power consumption, and the various mechanical configurations make the switch ideally suited for any application that need a rugged and reliable solution.

Besides manageable features such as Long-term availability, Quality of Service, Port Based VLAN, and IEEE 802.1Q VLAN, the µMAGBES also supports Rapid Spanning Tree IEEE 802.1D 2004 and allows to use redundant Ethernet connections without introducing network loops.

This µMAGBES solution is equipped with RJ45 connectors. All ports have status LEDs, indicating the activity and speed of each port, including reset and default setting.

The µMAGBES switch solution is extremely compact and comes as open frame or as boxed version with RJ45. Supply power is 5–36VDC and uses under any condition less than 6W (10-ports). The product can be operated at -20°C to 60°C and optionally even in extended temperature to be used outdoors. The solution is available with DIN-Rail or Flange mounting.

µMAGBES Highlights

- High-End RJ45 connectors
- Wide input 5 - 36VDC
- Fully manageable over Web Interface or Telnet
- Fanless operation
- Versions for extended temperature -40 to +85°C
- Can be used unmanaged
- Long-term availability
- Open frame solution

These features make the µMAGBES switch ideally suited for any rugged or industrial network application with long life cycle requirements. Due to the low power consumption, robust and flexible design, the product is well suited for tough environments. The µMAGBES makes it easy to set up a challenging network!

All MPL products are 100% designed and manufactured in Switzerland.
Technical Features

Board Key Data
- Switch lookup Engine: support up to 1024 MAC entries with automatic learning and aging
- Supports auto crossover (Auto MDI/MDIX)
- Supports polarity correction
- Jumbo Frame support: up to 10k Byte
- Status LED: 2 LEDs for each copper port (Link/Activity and Speed indicators)

Interfaces
- **LAN**: µMAGBES-A10 - 10-port Gigabit on RJ45 connectors
  - µMAGBES-A19 - 19-port Gigabit on RJ45 connectors
- **CLI**: Optional CLI interface over Micro USB connector

Management Software
- MPL developed and maintains a management SW with easy to use web interface.
- Management supports:
  - Port Based VLAN
  - Quality of Service
  - IEEE 802.1D RSTP support
  - SNMP V1, V2c, V3 support
  - Telnet
  - IGMPv3 snooping
  - IEEE 802.1Q VLAN
  - IEEE 802.1X MAC Address Checking
  - Port monitoring
  - Firmware Update via HTTP or TFTP
  - TLS (HTTPS)

Power
- Input voltage: 5VDC - 36VDC Input range, input over 4-pin power connector
- Power consumption: Typically 6W per 10 ports

Environment
- Storage Temperature: -45°C to 85°C (-49°F to 185°F)
- Operating Temperature:
  - -20°C to 60°C (-4°F to 140°F) at full operation
  - optionally -40°C to 85°C (-40°F to 185°F) at full operation
- Relative Humidity: 5% to 95% none condensing

Standard Compliance
- The µMAGBES is designed to meet or even exceed the most common standard, particular references are:
  - EMC: EN 55022, EN 55024, EN 61000, MIL-STD-461E
  - Shock & Vibration: EN 60068
  - Environmental & Safety: EN 50155, MIL-STD-810-F, EN 60601, EN 60950
  - Approval List: CE, IEC 60945, IACS E10

Dimensions

<table>
<thead>
<tr>
<th>Chassis version</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Weight</th>
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<tbody>
<tr>
<td>10 port boxed version</td>
<td>136mm</td>
<td>113mm</td>
<td>50mm</td>
<td>740g</td>
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<tr>
<td>19 port boxed version</td>
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<td>154mm</td>
<td>50mm</td>
<td>1300g</td>
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<tr>
<td>10 port open frame</td>
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<td>640g</td>
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<tr>
<td>19 port open frame</td>
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<td>42mm</td>
<td>1150g</td>
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</table>

Ordering Information

- **µMAGBES-A10DRX**
  - Option: X
    - Description: -40°C to +85°C
  - Copper: R
    - Description: RJ45
  - Mount: O
    - Description: Open Frame
  - Option: D
    - Description: DIN-Rail
  - F
    - Description: Flange