



## Product information MS4128-L3E EEC

Industrial Ethernet:Modular Industrial Switches:Modular switches:Switches:Layer 3 switches:MS4128-L3E EEC

<http://www.e-catalog.beldensolutions.com/link/57078-24455-49860-49862-24481-94675-87165/en/conf/uistate>

|  |   |
|--|---|
| <b>Name</b>  | MS4128-L3E EEC  |
|  |    |
|  | Power MICE, modular, managed Industrial Ethernet Switch, Layer 3 Switch with Software Enhanced, Ethernet (10 Mbit/s) and Fast-ETHERNET (100 Mbit/s) and Gigabit-Ethernet (1000 Mbit/s)  |
| <b>Delivery informations</b>                         |   |
| <b>Availability</b>                                  | available   |
| <b>Product description</b>                           |   |
| <b>Description</b>                                   | Power MICE, modular, managed Industrial Ethernet Switch, Layer 3 Switch with Software Enhanced, Ethernet (10 Mbit/s) and Fast-ETHERNET (100 Mbit/s) and Gigabit-Ethernet (1000 Mbit/s)  |
| <b>Port type and quantity</b>                        | up to 28 ports above media modules practicable, 4 X 1000 BASE-SX with SFP modules or 4 x 10/100/1000 BASE-TX and 24 Fast-ETHERNET (100 Mbit/s) ports (with MB-2T)   |
| <b>Type</b>  | MS4128-L3E EEC  |
| <b>Order No.</b>                                     | 943 009-203   |
| <b>More interfaces</b>                               |   |
| <b>Power supply/signaling contact</b>                | 2 plug-in terminal blocks, 4-pin  |
| <b>V.24 interface</b>                                | 1 x RJ11 socket   |
| <b>USB interface</b>                                 | 1 x USB to connect the AutoConfiguration Adapter ACA21-USB  |
| <b>Network size - cascading</b>                      |   |
| <b>Line - / star topology</b>                        | any   |
| <b>Ring structure (HIPER-Ring) quantity switches</b> | 50 (reconfiguration time < 50 ms typ. at LWL)   |
| <b>Power requirements</b>                            |   |
| <b>Operating voltage</b>                             | 24 V DC (-25% to +30%)  |
| <b>Current consumption at 24 V DC</b>                | 630 mA (without media modules)  |
| <b>Power consumption</b>                             | 15 W (without media modules)  |
| <b>Software</b>                                      |   |
| <b>Management</b>                                    | serial interface, web interface, SNMP V1/V2/V3, HiVision, file transfer SW HTTP/TFTP  |
| <b>Diagnostics</b>                                   | LEDs, signal contacts (24V DC / 1 A), syslog, logfile, RMON, port mirroring, Topology Discovery IEEE 802.1AB (LLDP)   |
| <b>Configuration</b>                                 | command line interface (CLI), TELNET, BootP, DHCP, DHCP Option 82, HiDiscovery, auto-configuration adapter (ACA21-USB)  |
| <b>Security</b>                                      | authentication 802.1x, port-security IP and MAC, SNMP V3, ACL (L2/L3/L4 packet filtering) 20 / port   |
| <b>Other services</b>                                | QoS 8 classes, port prioritisation IEEE 802.1D/p, VLAN IEEE 802.1Q, Multicast (IGMP Snooping/Querier), GMRP, Broadcast-UC-, MC-Limiter, Fast Aging, Flow Control IEEE 802.3x, PTP client (Precision Time Protocol, IEEE 1588), SNTP (Simple Network Time Protocol), Traffic Shaping, protocol based VLANs, static routing, dynamic routing (RIP V1/2), VRRP |
| <b>Redundancy</b>                                    |   |
| <b>Redundancy functions</b>                          | HIPER-Ring (ring structure), RSTP IEEE 802.1w (rapid spanning tree protocol), redundant network/ring coupling (master/receiver functionality), dual homing (master/receiver functionality), redundant 24 V power supply   |
| <b>Ambient conditions</b>                            |   |
| <b>Operating temperature</b>                         | -30 °C ... 60 °C  |
| <b>Storage/transport temperature</b>                 | -40 °C ... 70 °C  |
| <b>Relative humidity (non-condensing)</b>            | 10 % ... 95 %   |
| <b>MTBF</b>  | n/a   |
| <b>Protective paint on PCB</b>                       | Yes (conformal coating)   |
| <b>Mechanical construction</b>                       |   |
| <b>Dimensions (W x H x D)</b>                        | 315 mm x 134 mm x 140 mm  |
| <b>Mounting</b>                                      | DIN Rail  |
| <b>Weight</b>  | 2200 g  |
| <b>Protection class</b>                              | IP20  |



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**Mechanical stability**

|                                |   |
|--------------------------------|---|
| <b>IEC 60068-2-27 shock</b>    | 15 g, 11 ms duration, 18 shocks   |
| <b>IEC 60068-2-6 vibration</b> | 1 mm, 2 Hz-13.2 Hz, 90 min.; 0.7 g, 13.2 Hz-100 Hz, 90 min.; 3.5 mm, 3 Hz-9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz-150 Hz, 10 cycles, 1 octave/min |

**EMC interference immunity**

|   |   |
|---|---|
| <b>EN 61000-4-2 electrostatic discharge (ESD)</b> | 6 kV contact discharge, 8 kV air discharge                      |
| <b>EN 61000-4-3 electromagnetic field</b>         | 10 V/m (80-1000 MHz)  |
| <b>EN 61000-4-4 fast transients (burst)</b>       | 2 kV power line, 1 kV data line                                 |
| <b>EN 61000-4-5 surge voltage</b>                 | power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line |
| <b>EN 61000-4-6 conducted immunity</b>            | 3 V (10 kHz-150 kHz), 10 V (150 kHz-80 MHz)                     |

**EMC emitted immunity**

|                          |                            |
|--------------------------|----------------------------|
| <b>FCC CFR47 Part 15</b> | FCC 47 CFR Part 15 Class A |
| <b>EN 55022</b>          | EN 55022 Class A           |

**Approvals**

|   |                                 |
|---|---------------------------------|
| <b>Safety of industrial control equipment</b> | cUL 508                         |
| <b>Hazardous locations</b>                    | cUL 1604 Class1 Div 2 (pending) |
| <b>Shipbuilding</b>                           | Germanischer Lloyd              |
| <b>Railway norm</b>                           | EN50121-4                       |

**Scope of delivery and accessories**

|  |  |
|--|--|
| <b>Scope of delivery</b>               | device, 2 terminal blocks, operating manual  |
| <b>Accessories to order separately</b> | rail power supply RPS 30, RPS 80 EEC or RPS 120 EEC, terminal cable, HiVision network management, auto-configuration adapter (ACA21-USB), 19" installation frame, labels ML-MS2/MM, additional backplane MB-2T |

For more information please contact:

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