



## Product information Compact OpenRail Fast Ethernet Switch 4-25 ports - RS20-0800M2M2SDHPHH09.0.

| Industrial Ethernet: Compact configurable managed switches: Managed Industrial Ethernet RS20/30/40 Switches : Compact OpenRail Fast Ethernet Switch 4-25 ports                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="http://dev-catalog.beldensolutions.com/link/57078-24455-49854-458702-458689/en/RS20-0800M2M2SDHPHH09.0/uistate">http://dev-catalog.beldensolutions.com/link/57078-24455-49854-458702-458689/en/RS20-0800M2M2SDHPHH09.0/uistate</a> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Name                                                                                                                                                                                                                                        | Compact OpenRail Fast Ethernet Switch 4-25 ports                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                             | 8 port Fast-Ethernet-Switch, managed, software Layer 2 Professional, for DIN rail store-and-forward-switching, fanless design                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Delivery informations</b>                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Availability                                                                                                                                                                                                                                | available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Product description</b>                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Description                                                                                                                                                                                                                                 | 8 port Fast-Ethernet-Switch, managed, software Layer 2 Professional, for DIN rail store-and-forward-switching, fanless design                                                                                                                                                                                                                                                                                                                                                                      |
| Port type and quantity                                                                                                                                                                                                                      | 8 ports in total; 1. uplink: 100BASE-FX, MM-SC; 2. uplink: 100BASE-FX, MM-SC; 6 x standard 10/100 BASE TX, RJ45                                                                                                                                                                                                                                                                                                                                                                                    |
| Type                                                                                                                                                                                                                                        | RS20-0800M2M2SDHPHH09.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Order No.                                                                                                                                                                                                                                   | 943 434-016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>More Interfaces</b>                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Power supply/signaling contact                                                                                                                                                                                                              | 1 x plug-in terminal block, 6-pin                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| V.24 interface                                                                                                                                                                                                                              | 1 x RJ11 socket                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| USB interface                                                                                                                                                                                                                               | 1 x USB to connect the AutoConfiguration Adapter ACA21-USB                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Network size - length of cable</b>                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Multimode fiber (MM) 50/125 µm                                                                                                                                                                                                              | 0 - 5000 m, 8 dB link budget at 1300 nm, A = 1 d/km, 3 dB reserve, B = 800 MHz x km                                                                                                                                                                                                                                                                                                                                                                                                                |
| Multimode fiber (MM) 62.5/125 µm                                                                                                                                                                                                            | 0 - 4000 m, 11 dB link budget at 1300 nm, A = 1 d/km, 3 dB reserve, B = 500 MHz x km                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Network size - cascading</b>                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Line - / star topology                                                                                                                                                                                                                      | any                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Ring structure (HIPER-Ring) quantity switches                                                                                                                                                                                               | 50 (reconfiguration time < 0.3 sec.)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Power requirements</b>                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Operating voltage                                                                                                                                                                                                                           | 12/24/48 V DC (9,6-60) V and 24 V AC (18-30) V (redundant)                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Current consumption at 24 V DC                                                                                                                                                                                                              | 321 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Current consumption at 48 V DC                                                                                                                                                                                                              | 161 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Power output in Btu (IT) h                                                                                                                                                                                                                  | 26.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Software</b>                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Management                                                                                                                                                                                                                                  | Dual Software Image Support; TFTP; LLDP (802.1AB); LLDP-MED; SSHv1; SSHv2; V.24; HTTP; HTTPS; Traps; SNMP v1/v2/v3; Telnet                                                                                                                                                                                                                                                                                                                                                                         |
| Diagnostics                                                                                                                                                                                                                                 | Management Address Conflict Detection; Address Relearn Detection; MAC Notification; Signal Contact; Device Status Indication; TCPDump; LEDs; Syslog; Port Monitoring with Auto-Disable; Link Flap Detection; Overload Detection; Duplex Mismatch Detection; RMON (1,2,3,9); Port Mirroring 1:1; Port Mirroring 8:1; Port Mirroring N:1; System Information; Self-Tests on Cold Start; Copper Cable Test; SFP Management; Configuration Check Dialog; Switch Dump; Link Speed and Duplex Monitoring |
| Configuration                                                                                                                                                                                                                               | AutoConfiguration Adapter ACA11 Limited Support (RS20/30/40, MS20/30); Automatic Configuration Undo (roll-back); Configuration Fingerprint; BOOTP/DHCP Client with Auto-Configuration; DHCP Server: per Port; DHCP Server: Pools per VLAN; DHCP Server: Option 43; AutoConfiguration Adapter ACA21/22 (USB); HiDiscovery; DHCP Relay with Option 82; Command Line Interface (CLI); CLI Scripting; Full-featured MIB Support; Web-based Management; Context-sensitive Help                          |
| Security                                                                                                                                                                                                                                    | IP-based Port Security; MAC-based Port Security; Port-based Access Control with 802.1X; Guest/unauthenticated VLAN; RADIUS VLAN Assignment; Multi-Client Authentication per Port; MAC Authentication Bypass; Access to Management restricted by VLAN; HTTPS Certificate Management; Restricted Management Access; Appropriate Use Banner; SNMP Logging; Local User Management; Remote Authentication via RADIUS                                                                                    |
| Redundancy functions                                                                                                                                                                                                                        | Advanced Ring Configuration for MRP; HIPER-Ring (Manager); HIPER-Ring (Ring Switch); Fast HIPER-Ring; Link Aggregation with LACP; Media Redundancy Protocol (MRP) (IEC62439-2); Redundant Network Coupling; RSTP 802.1D-2004 (IEC62439-1); MSTP (802.1Q); RSTP Guards; RSTP over MRP                                                                                                                                                                                                               |
| Industrial Profiles                                                                                                                                                                                                                         | EtherNet/IP Protocol; PROFINET IO Protocol                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Time synchronisation                                                                                                                                                                                                                        | SNTP server and client, Buffered RTC                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Miscellaneous                                                                                                                                                                                                                               | Manual Cable Crossing                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Switching                                                                                                                                                                                                                                   | Disable Learning (hub functionality); Independent VLAN Learning; Fast Aging; Static Unicast/Multicast Address Entries; QoS / Port Prioritization (802.1D/p); TOS/DSCP Prioritization; Egress Broadcast Limiter per Port; Flow Control (802.3X); VLAN (802.1Q); GARP VLAN Registration Protocol (GVRP); Double VLAN Tagging (QinQ); Voice VLAN; GARP Multicast Registration Protocol (GMRP); IGMP Snooping/Querier (v1/v2/v3)                                                                       |



## Industrial Ethernet: Compact configurable managed switches: Managed Industrial Ethernet RS20/30/40 Switches : Compact OpenRail Fast Ethernet Switch 4-25 ports

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### Ambient conditions

|                                    |                            |
|------------------------------------|----------------------------|
| Operating temperature              | 0 °C ... 60 °C             |
| Storage/transport temperature      | -40 °C ... 70 °C           |
| Relative humidity (non-condensing) | 10 % ... 95 %              |
| MTBF                               | 48.6 years (MIL-HDBK-217F) |
| Protective paint on PCB            | No                         |

### Mechanical construction

|                        |                         |
|------------------------|-------------------------|
| Dimensions (W x H x D) | 74 mm x 131 mm x 111 mm |
| Mounting               | DIN Rail                |
| Weight                 | 410 g                   |
| Protection class       | IP20                    |

### Mechanical stability

|                         |                                                                                                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| IEC 60068-2-27 shock    | 15 g, 11 ms duration, 18 shocks                                                                                                                     |
| IEC 60068-2-6 vibration | 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

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

### EMC emitted immunity

|                   |                            |
|-------------------|----------------------------|
| FCC CFR47 Part 15 | FCC 47 CFR Part 15 Class A |
| EN 55022          | EN 55022 Class A           |

### Approvals

|                                        |                             |
|----------------------------------------|-----------------------------|
| Safety of industrial control equipment | cUL 508                     |
| Hazardous locations                    | ISA 12.12.01 Class 1 Div. 2 |
| Railway norm                           | EN50121-4                   |
| Substation                             | IEC 61850-3, IEEE 1613      |

### Scope of delivery and accessories

|                   |                                          |
|-------------------|------------------------------------------|
| Scope of delivery | Device, terminal block, operating manual |
|-------------------|------------------------------------------|

For more information please contact:

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