



Product: RSP20-8TX/3SFP-2A

Configurator: RSP20-8TX/3SFP-2A

Configurator Description

The RSP series features hardened, compact managed industrial DIN rail switches with Fast and Gigabit speed options. These switches support comprehensive redundancy protocols like PRP (Parallel Redundancy Protocol), HSR (High-availability Seamless Redundancy), DLR (Device Level Ring) and FuseNet™ and provide an optimum degree of flexibility with several thousand variants.

Technical Specifications

Product description

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|--------------------------|---|
| Type | RSP20-8TX/3SFP-2A (Product Code: RSP20-11003Z6TT-SCCY9HSE2AXX.X.XX) |
| Description | Managed Industrial Switch for DIN Rail, fanless design Fast Ethernet Type |
| Part Number | 942053018 |
| Configurator Part Number | 942053999 |
| Port Type and Quantity | 11 Ports in total: 8 x 10/100BASE TX / RJ45; 3 x SFP slot FE (100 Mbit/s) |

More Interfaces

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| Power supply/signaling contact | 2 x plug-in terminal block, 2-pin; 1 x plug-in terminal block, 2-pin |
| V.24 interface | 1 x RJ11 socket |
| SD-card slot | 1 x SD card slot to connect the auto configuration adapter ACA31 |

Network size - length of cable

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| Twisted pair (TP) | 0-100 |
| Single mode fiber (SM) 9/125 μm | see SFP fiber module M-SFP-xx / M-Fast SFP-xx |
| Single mode fiber (LH) 9/125 μm (long haul transceiver) | see SFP fiber module M-SFP-xx / M-Fast SFP-xx |
| Multimode fiber (MM) 50/125 μm | see SFP fiber module M-SFP-xx / M-Fast SFP-xx |
| Multimode fiber (MM) 62.5/125 μm | see SFP fiber module M-SFP-xx / M-Fast SFP-xx |

Network size - cascading

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| Line - / star topology | any |
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Power requirements

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| Operating Voltage | 2 x 24/36/48 VDC (18 -60 VDC) |
| Power consumption | 15 W |
| Power output in BTU (IT)/h | 51 |

Software

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| Switching | CoS Queue Management, Egress Interface Shaping, Fast Aging, Flow Control (802.3X), Forward unknown multicast to query ports, IGMP Snooping/Querier per VLAN (v1/v2/v3), Independent VLAN Learning, Ingress Storm Protection, Interface Trust Mode, Jumbo Frames, Multiple MAC Registration Protocol (MMRP), Multiple Registration Protocol (MRP), Multiple VLAN Registration Protocol (MVRP), QoS / Port Prioritization (802.1D/p), Queue-Shaping / Max. Queue Bandwidth, Static Unicast/Multicast Address Entries, TOS/DSCP Prioritization, Unknown Multicast Filtering, VLAN (802.1Q), VLAN Unaware Mode, Voice VLAN, Double VLAN Tagging (QinQ), GARP Multicast Registration Protocol (GMRP), GARP VLAN Registration Protocol (GVRP), IP Ingress DiffServ Classification and Policing, IP subnet-based VLAN, MAC-based VLAN, Protocol-based VLAN |
| Redundancy | HSR 1 GBit/s, Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Client, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Manager, PRP 1 GBit/s, RSTP 802.1D-2004 (IEC62439-1), RSTP Guards, HIPER-Ring (Ring Switch), HIPER-Ring over Link Aggregation, MRP over Link Aggregation, MSTP (802.1Q), Redundant Network Coupling, Sub Ring Manager |
| Management | Dual Software Image Support, TFTP, SFTP, SCP, LLDP (802.1AB), LLDP-MED, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet, DNS Client, ITxPT Module Inventory, OPC-UA Server, Service Discovery (bonjour), SNMPv1/v2 Read-Only |
| Diagnostics | Configuration Check Dialog, Copper Cable Test, Device Status Indication, Duplex Mismatch Detection, LEDs, Link Flap Detection, Link Speed and Duplex Monitoring, MAC Notification, Management Address Conflict Detection, Overload Detection, Persistent Logging on ACA, Port Mirroring 1:1, Port Mirroring 8:1, Port Mirroring N:1, Port Monitoring with Auto-Disable, RMON (1,2,3,9), Self-Tests on Cold Start, SFP Management, Signal Contact, Snapshot Configuration Feature, Switch Dump, Syslog, System Information, TCDDump, Email Notification, Loop Protection, RSPAN, SFLOW, VLAN Mirroring |
| Configuration | Auto Disable, AutoConfiguration Adapter ACA31 (SD card), Automatic Configuration Undo (roll-back), Backup config on a remote server when saving, BOOTP/DHCP Client with Auto-Configuration, Clear config but keep IP settings, CLI script handling over ENVm at boot, CLI Scripting, Command Line Interface (CLI), Configuration Fingerprint, Context-sensitive Help, DHCP Relay with Option 82, DHCP Server: per Port, DHCP Server: Pools per VLAN, Full-featured MIB Support, HiDiscovery, HTML5 based Management, Web-based Management, XML-based Configuration File, Interface Shutdown via Tracking |
| Security | Access to Management restricted by VLAN, Appropriate Use Banner, Audit Trail, CLI Logging, Configurable Number of Login Attempts, Configurable Password Policy, Denial-of-Service Prevention, Device Security Indication, Guest/unauthenticated VLAN, HTTPS Certificate Management, Ingress VLAN-based ACL, Integrated Authentication Server (IAS), Local User Management, MAC-based Port Security, Multiple Privilege Levels, Password change on first login, Port-based Access Control with 802.1X, RADIUS Client, RADIUS VLAN Assignment, Remote Authentication via RADIUS, Restricted Management Access, Signed Firmware Images, SNMP Logging, User Account Locking, VLAN-based ACL, ACL Flow-based Limiting, DHCP Snooping, Dynamic ARP Inspection, Format options for MAC authentication bypass, Ingress IPv4-based ACL, Ingress MAC-based ACL, LDAP, MAC Authentication Bypass, Multi-Client Authentication per Port, RADIUS Policy Assignment, Time-based ACL |
| Time synchronisation | 802.1AS, 802.1AS-2020, Buffered Real Time Clock, PTPv2 Boundary Clock, PTPv2 Transparent Clock two-step, SNTP Client, SNTP Server |
| Industrial Profiles | EtherNet/IP Protocol, IEC61850 Protocol (MMS Server, Switch Model), Modbus TCP, PROFINET Protocol |
| Miscellaneous | Manual Cable Crossing, Port Power Down |

Ambient conditions

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| Operating temperature | 0-+60 |
| Minimum Storage Temperature | -40-+70 °C |
| Relative humidity (non-condensing) | 10-95 % |

Mechanical construction

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| Dimensions (WxHxD) | 90 mm x 164 mm x 120 mm |
| Weight | 1200 g |
| Mount Type | DIN rail |
| Protection class | IP20 |

Mechanical stability

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

EMC interference immunity

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| EN 61000-4-2 electrostatic discharge (ESD) | 8 kV contact discharge, 15 kV air discharge |
| EN 61000-4-3 electromagnetic field | 35 V/m (80-2700 MHz); 1 kHz, 80% AM |
| EN 61000-4-4 fast transients (burst) | 4 kV power line, 4 kV data line |
| EN 61000-4-5 surge voltage | power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line IEC61000-4-5: power line 5 kV (line/earth) |
| EN 61000-4-6 Conducted Immunity | 3 V (10 kHz-150 kHz), 10 V (150 kHz-80 MHz) |
| EN 61000-4-16 mains frequency voltage | 30 V, 50 Hz continuous; 300 V, 50 Hz 1 s |

EMC emitted immunity

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| EN 55032 | EN 55032 Class A |
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Approvals

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| Basis Standard | CE, FCC, EN61131 |
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| Safety of industrial control equipment | cUL508 |
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Reliability

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| Guarantee | 60 months (please refer to the https://assets.belden.com/m/1424ddb7a3280e7a/original/Hirschmann-Automation-and-Control-GmbH-Terms-of-Guarantee.pdf terms of guarantee & it/a for detailed information) |
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Scope of delivery and accessories

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| Accessories | Rail power supply RPS 30, RPS 80 EEC, RPS 120 EEC, terminal cable, network management Industrial HiVision, auto-configuration adapter ACA31, 19" installation frame |
| Scope of delivery | Device, terminal blocks , General safety instructions |

Further Instructions

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| Product Documentation | https://www.doc.hirschmann.com/index.html |
| Certificates | https://www.doc.hirschmann.com/certificates.html |

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