



**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

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
Port type and quantity	11 Ports in total: 8 x 10/100BASE TX / RJ45; 3 x SFP slot FE (100 Mbit/s)

#### More Interfaces

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

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 - cascadiability

Line - / star topology	any
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#### Power requirements

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

#### Software

Switching	Independent VLAN Learning, Fast Aging, Static Unicast/Multicast Address Entries, QoS / Port Prioritization (802.1D/p), TOS/DSCP Prioritization, Interface Trust Mode, CoS Queue Management, Queue-Shaping / Max. Queue Bandwidth, Flow Control (802.3X), Egress Interface Shaping, Ingress Storm Protection, Jumbo Frames, VLAN (802.1Q), VLAN Unaware Mode, Voice VLAN, IGMP Snooping/Querier per VLAN (v1/v2/v3), Unknown Multicast Filtering, Multiple VLAN Registration Protocol (MVRP), Multiple MAC Registration Protocol (MMRP), Multiple Registration Protocol (MRP) IP Ingress DiffServ Classification and Policing, Protocol-based VLAN, GARP VLAN Registration Protocol (GVRP), MAC-based VLAN, IP subnet-based VLAN, GARP Multicast Registration Protocol (GMRP)
Redundancy	Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2), RSTP 802.1D-2004 (IEC62439-1), RSTP Guards HIPER-Ring (Ring Switch), HIPER-Ring over Link Aggregation, MRP over Link Aggregation, Redundant Network Coupling, Sub Ring Manager, MSTP (802.1Q)
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

Diagnostics	Management Address Conflict Detection, MAC Notification, Signal Contact, Device Status Indication, TCPDump, LEDs, Syslog, Persistent Logging on ACA, Port Monitoring with Auto-Disable, Link Flap Detection, Overload Detection, Duplex Mismatch Detection, Link Speed and Duplex Monitoring, 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, Snapshot Configuration Feature Email Notification, RSPAN, SFLOW, VLAN Mirroring
Configuration	Automatic Configuration Undo (roll-back), Configuration Fingerprint, Text-based Configuration File (XML), BOOTP/DHCP Client with Auto-Configuration, DHCP Server: per Port, DHCP Server: Pools per VLAN, AutoConfiguration Adapter ACA31 (SD card), HiDiscovery, DHCP Relay with Option 82, Command Line Interface (CLI), CLI Scripting, Full-featured MIB Support, Web-based Management, Context-sensitive Help Automatic Configuration Undo (roll-back), Configuration Fingerprint, Text-based Configuration File (XML), Backup config on a remote server when saving, Clear config but keep IP settings, CLI script handling over ENVm at boot, HTML5 based Management
Security	MAC-based Port Security, Port-based Access Control with 802.1X, Guest/unauthenticated VLAN, Integrated Authentication Server (IAS), RADIUS VLAN Assignment, Denial-of-Service Prevention, VLAN-based ACL, Ingress VLAN-based ACL, Basic ACL, Access to Management restricted by VLAN, Device Security Indication, Audit Trail, CLI Logging, HTTPS Certificate Management, Restricted Management Access, Appropriate Use Banner, Configurable Password Policy, Configurable Number of Login Attempts, SNMP Logging, Multiple Privilege Levels, Local User Management, Remote Authentication via RADIUS, User Account Locking RADIUS Policy Assignment, Multi-Client Authentication per Port, MAC Authentication Bypass, DHCP Snooping, Dynamic ARP Inspection, LDAP, Ingress MAC-based ACL, Ingress IPv4-based ACL, Time-based ACL, ACL Flow-based Limiting Password change on first login
Time synchronisation	PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, Buffered Real Time Clock, SNTP Client, SNTP Server
Industrial Profiles	EtherNet/IP Protocol, IEC61850 Protocol (MMS Server, Switch Model), ModbusTCP, PROFINET IO Protocol
Miscellaneous	Manual Cable Crossing, Port Power Down

## Ambient conditions

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

## Mechanical construction

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

## Mechanical stability

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

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

EN 55032	EN 55032 Class A
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## Approvals

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

## Scope of delivery and accessories

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

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