



Product: RSP35-08033O6TT-TCCWBHPE2SXX.X.XX

Configurator: RSP - Rail Switch Power configurator

### **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**

| Description            | Managed Industrial Switch for DIN Rail, fanless design Fast Ethernet, Gigabit uplink type - Enhanced (PRP, Fast MRP, HSR, NAT (-FE only) with L3 type) |
|------------------------|--|
| Port type and quantity | 11 Ports in total: 3 x SFP slots (100/1000 Mbit/s); 8x 10/100BASE TX / RJ45  |

#### **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)<br>9/125 µm (long haul<br>transceiver) | see SFP fiber module M-SFP-xx / M-Fast SFP-xx |
| Multimode fiber (MM)<br>50/125 µm                             | see SFP fiber module M-SFP-xx / M-Fast SFP-xx |
| Multimode fiber (MM)<br>62.5/125 µm                           | see SFP fiber module M-SFP-xx / M-Fast SFP-xx |

#### **Network size - cascadibility**

|--|

### **Power requirements**

| Operating Voltage          | 2 x 24/36/48 VDC (18 -60 VDC) |
|----------------------------|-------------------------------|
| Power consumption          | 19 W                          |
| Power output in BTU (IT)/h | 65                            |

#### **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 (MRP), Layer 2 Loop Protection |
|-------------|--|
| Redundancy  | Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2), RSTP 802.1D-2004 (IEC62439-1), RSTP Guards Fast MRP (IEC62439-2), High Availability Seamless Redundancy Protocol (HSR) (IEC62439-3), Parallel Redundancy Protocol (PRP) (IEC62439-3) HSR 1 GBit/s, PRP 1 GBit/s   |
| Management  | Dual Software Image Support, TFTP, SFTP. SCP. LLDP (802.1AB), LLDP-MED, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet OPC-UA Server   |
| 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 N:1, System Information, Self-Tests on Cold Start, Copper Cable Test, SFP Management, Configuration Check Dialog, Switch Dump, Snapshot Configuration Feature   |

| 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  |
|----------------------|---|
| 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 |
| 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              | -40-+70 °C                                 |
|------------------------------------|--|
| Note                               | IEC 60068-2-2 Dry Heat Test +85°C 16 Hours |
| Storage/transport temperature      | -40-+85 °C                                 |
| Relative humidity (non-condensing) | 10-95 %                                    |

# **Mechanical construction**

| Dimensions (WxHxD) | 98 mm x 164 mm x 120 mm |
|--------------------|-------------------------|
| Weight             | 1500 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<br>electrostatic discharge<br>(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 IEEE1613: power line 5 kV (line/earth) |
| EN 61000-4-6 Conducted<br>Immunity               | 3 V (10 kHz-150 kHz), 10 V (150 kHz-80 MHz)  |
| EN 61000-4-16 mains frequency voltage            | 30 V, 50 Hz continous; 300 V, 50 Hz 1 s  |

# **EMC** emitted immunity

# **Approvals**

| Basis Standard      | CE, FCC, EN61131          |
|---------------------|---------------------------|
| Hazardous locations | ATEX Zone 2; IECEx Zone 2 |
| Shipbuilding        | DNV                       |

# Reliability

| Guarantee | 60 months (please refer to the terms of guarantee for detailed information) |
|-----------|---|

# 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 adpater ACA31, 19" installation frame |
|-------------------|---|
| Scope of delivery | Device, terminal blocks , General safety instructions   |

## **Further Instructions**

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

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