



Product: RSPE30-24044O7T99-SK9V999HHSE2SXX.X.XX

Configurator: RSPE - Rail Switch Power Enhanced configurator

Configurator Description

The compact and extremely robust RSPE switches comprise a basic device with eight twisted pair ports and four combination ports that support Fast Ethernet or Gigabit Ethernet. The basic device – optionally available with the HSR (High-Availability Seamless Redundancy) and PRP (Parallel Redundancy Protocol) uninterruptible redundancy protocols, plus precise time synchronization in accordance with IEEE 1588 v2 - can be extended to provide up to 28 ports by adding two media modules.

Technical Specifications

Product description

| Description | Managed Fast/Gigabit Industrial Ethernet Switch, fanless design , with HiOS Release 08.7 |
|------------------------|---|
| Port type and quantity | Ports in total up to 28 Base unit: 4 x Fast/Gigbabit Ethernet Combo ports plus 8 x Fast Ethernet TX ports expandable with two slots for media modules with 8 Fast Ethernet ports each |

More Interfaces

| Power supply/signaling contact | 1 x plug-in terminal block 3-pins, 1x plug-in terminal block 2-pins |
|--------------------------------|---|
| V.24 interface | 1 x RJ11 socket |
| SD-card slot | 1 x SD card slot to connect the auto configuration adapter ACA31 |
| USB interface | 1 x USB to connect auto-configuration adapter ACA22-USB |

Network size - length of cable

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

Network size - cascadibility

| Line - / star topology | any |
|------------------------|-----|
|------------------------|-----|

Power requirements

| Operating Voltage | 1 x 60-250 V DC (48-320 V DC) and 110-230 V AC (88-265 V AC) |
|-------------------|--|
| Power consumption | maximum 36W depending on fiber port count |

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), Password change on first login, Double VLAN Tagging |
|-------------|---|
| Redundancy | Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2), RSTP 802.1D-2004 (IEC62439-1), RSTP Guards |
| Management | Dual Software Image Support, TFTP, SFTP. SCP. LLDP (802.1AB), LLDP-MED, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet |
| 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 |

| 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 ACA21/22 (USB), 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

| MTBF (Telecordia SR-332 Issue 3) @ 25°C | 996 525 h |
|--|------------|
| Operating temperature | 0-+60 °C |
| Storage/transport temperature | -40-+70 °C |
| Relative humidity (non-condensing) | 10-95 % |

Mechanical construction

| Dimensions (WxHxD) | 209 mm x 164 mm x 120 mm |
|--------------------|--------------------------|
| Weight | 2200 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 IEEE1613: 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 continous; 300 V, 50 Hz 1 s |

EMC emitted immunity

| EN 55022 | EN 55032 Class A |
|-------------------|----------------------------|
| FCC CFR47 Part 15 | FCC 47CFR Part 15, Class A |

Approvals

| Basis Standard | CE, FCC, RCM, EN61131 |
|----------------|-----------------------|
| Substation | IEC61850-3, IEEE1613 |

Scope of delivery and accessories

| Accessories | Rail Power Supply RPS 80/120, Terminal Cable, Network management Industrial HiVision, ACA22, ACA31, SFP |
|-------------------|---|
| Scope of delivery | Device, terminal blocks , General safety instructions |

Further Instructions

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

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