HIRSCHMANN

RSP Switches Technical Specifications

Product Description				
Type	**RSP20-xx**	**RSP30-xx**	**RSP25-xx**	**RSP35-xx**
Description	Managed, Industrial Switch DIN Rail, fanless design			
Port Type and Quantity	Ports in total: 11, 3 x FE SFP slots, 4 x FE SFP/4 x10/100 TX ports, or 8 x10/100 TX ports	Ports in total: 11, 3 x FE/GE SFP slots, 4 x FE SFP/4 x10/100 TX ports, or 8 x10/100 TX ports	Ports in total: 11, 3 x FE SFP slots, 4 x FE SFP/4 x10/100 TX ports, or 8 x10/100 TX ports	Ports in total: 11, 3 x FE/GE SFP slots, 4 x FE SFP/4 x10/100 TX ports, or 8x 10/100 TX ports
Additional Interfaces				
V.24 Interface	1x RJ11 socket			
SD Card Slot	1x to connect auto-configuration adapter ACA31 (SD-card)			
Gigabit Ethernet Network Size				
Multimode Fiber (MM)	50/125 µm, 0 – 550 m, 7.5 dB link budget; 62.5/125 µm 0 – 275 m, 7.5 dB link budget (with M-SFP-SX/LC)			
Single Mode Fiber (SM) 9/125 µm	0 – 20 km, 11 dB link budget (with M-SFP-LX/LC); 14 – 42 km, 5 – 20 dB link budget (with M-SFP-LX+/LC)			
Single Mode Fiber (LH) 9/125 µm	24 – 72 km, 6 – 22 dB link budget (with M-SFP-LH/LC); 70 – 128 km, 15 – 30 dB link budget (with M-SFP-LH+/LC)			
Fast Ethernet Network Size				
Twisted Pair	0 – 100 m			
Multimode Fiber (MM)	50/125 µm, 0 – 5000 m, 8 dB link budget; 62.5/125 µm, 0 – 4000 m, 11 dB link budget (with M-Fast SFP-MM/LC)			
Single Mode Fiber (SM) 9/125 µm	0 – 25 km, 13 dB link budget (with M-Fast SFP-SM/LC); 25 – 65 km, 10 – 29 dB link budget (with M-Fast SFP-SM+/LC)			
Single Mode Fiber (LH) 9/125 µm	40 – 104 km, 10 – 29 dB link budget (with M-Fast SFP-LH/LC)			
Network Size – Cascadibility				
Line-/Star Topology	any			
Ring Structure	>200 Switches			
Fault Recovery Time	0 ms with PRP or HSR			
Power Requirements				
Operating Voltage	24/36/48 V DC redundant, or 60/120/250 V DC and 110/230 V AC			
Software				
Management	V.24, Telnet, SSHv2, HTTP, HTTPS, TFTP, SFTP, SNMP v1/v2/v3, Traps			
Diagnostics	LED, persistent logging, syslog, signal contact, device status indication, port mirroring N:1, RMON (1,2,3,9), TCPDump, LLDP, copper cable test, SFP management (temperature, optical input and output power), switch dump, configuration check dialog, system information, self tests on cold start, system monitor 1			
Configuration	Command line interface (CLI), web based management, full featured MIB support, BOOTP/DHCP client with auto configuration, HiDiscovery, auto-configuration adapter ACA31 (SD card), Automatic configuration undo (roll-back), text based configuration file, CLI scripting			
Security	MAC based port security, Authentication (IEEE802.1x), Guest/unauthenticated VLAN, Radius client, Restricted management access, Local user accounts, different privilege levels, management authentication via RADIUS, account locking, configurable password policy, account locking, audit trail, configurable login attempts, HTTPS certificate management, CLI/SNMP logging			
Redundancy Functions	MRP, RSTP 802.1w, further protocols in preparation			
Enhanced Redundancy Functions	–	–	Fast MRP, PRP, HSR (pending)	Fast MRP, PRP, HSR (pending)
Filter	QoS (8 classes), CoS queue management, interface trust mode, TOS/DSCP prioritization, port priority (IEEE802.1D/p), VLAN (IEEE802.1Q), IGMP snooping/querier per VLAN (v1/v2/v3), unkown multicast filtering, independent VLAN learning, static unicast/multicast address entries, fast aging			
Time Synchronization	PTPv2 TC two-step, SNTP server and client, Buffered RTC			
Flow Control	Flow control (IEEE802.3X), egress interface shaping, ingress storm protection			
Miscellaneous	Port power down, cable crossing, dual image support, VLAN unaware mode, access to management restricted by VLAN			
Ambient Conditions				
Operating Temperature	0°C to 60°C or -40°C to +70°C, IEC 60068-2-2 Dry Heat Test +85°C, 16 Hours, optional conformal coating			
Relative Humidity (non-condensing)	10% to 95%			
Mechanical Construction				
Dimensions (WxHxD)	90 (98) x 164 x 120 mm (EEC)			
Weight	1.2 kg, (1.5 kg EEC)			
Protection Class	IP30			
Approvals				
Safety of Industrial Control Equipment	cUL 508 (pending)			
Substation	IEEE61850-3, IEEE1613			
Transportation	NEMA TS2 (pending), EN50121-4 (pending)			

RSP Series Managed Industrial DIN Rail Switch Configurator

Fast and Gigabit Ethernet Networks

RSP 3 5 - 08 03 3O6 TT - E K9 Y9 HP E 2R XX.X XX

Design/Models
RSP- = Rail Switch Power

Data Rates
2 = 10/100 Mbit Ports
3 = 10/100 Mbit and 10/100/1000 Mbit Ports

Hardware Type
0 = Standard
5 = Enhanced Redundancy (PRP, Fast MRP, HSR*), Hardware IEEE1588 v2

Number of 10/100 Mbit Ethernet Ports
08 = 8 x 10/100 Mbit/s
11 = 11x 10/100 Mbit/s

Number of 10/100/1000 Mbit Ethernet Ports
00 = None
03 = 3x 10/100/1000 Mbit/s

Uplink Ports
3Z6 = 1 x 3x SFP slot (100 Mbit)
3O6 = 3x SFP slot (1000 MBit)

Port Configuration
TT = All Twisted Pair / RJ45
ZT = 4x SFP slot (100 Mbit) ; 4x (100MBit) Twisted Pair / RJ45

Temperature Range
S = Standard 0°C to 60°C
T = Extended -40°C to 70°C
E = Extended -40°C to 70°C & Conformal Coating

Voltage Range
CC = 2 x 24/36/48 VDC (18 -60VDC)
K9 = 1x 60/110/125/220/250 VDC (48V - 320 VDC) and 110/120/220/230 VAC (88 - 265 VAC)

Approvals
Z9 = CE; FCC; EN61131
Y9 = “Z9” + cUL508
V9 = “Z9” + IEC 61850; IEEE1613
VY = “V9” + cUL508

Factory Default Redundancy Configuration
HS = Standard
HM = Fast MRP
HP = PRP

Software Configuration
H = Standard
E = Enhanced Encryption

Software Level
2R = Layer 2 Rail Switch Power Software

Software Version
01.0 = Software version 01.0
XX.X = Newest Software Version

Bugfix
0 = Bugfix version 00
XX = Newest Bugfix Version