HIRSCHMANN
A **BELDEN** BRAND

Product: RSR20-0800M2M2T1SKKHPHH

Configurator: RSR - Rugged Managed Ethernet Switch configurator

Configurator Description

The manageable RSR20 and RSR30 switches are designed for extremely high demands with regard to shock and vibration resistance as well as electromagnetic compatibility (EMC).

Technical Specifications

Product description

Description	Fast Ethernet Switch (8 x FE), managed, Software Layer 2 Professional, for DIN rail, store-and-forward-switching, fanless design
Part Number	943953016
Availability	no longer available
Port type and quantity	Uplink 1: 100BASE-FX, MM-SC ; Uplink 2: 100BASE-FX, MM-SC ; Further Ports: 10/100BASE-TX, RJ45

More Interfaces

Power supply/signaling contact	2 x plug-in terminal 3-pin, 2 x plug-in terminal 2-pin
V.24 interface	1 x RJ11 socket
USB interface	1 x USB to connect auto-configuration adapter ACA21-USB

Network size - length of cable

Twisted pair (TP)	Further Ports: 0 - 100 m
Multimode fiber (MM) 50/125 µm	Uplink 1: 0 - 5000 m, 8 dB Link Budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 800 MHz x km \\\ Uplink 2: 0 - 5000 m, 8 dB Link Budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 800 MHz x km \\\
Multimode fiber (MM) 62.5/125 µm	Uplink 1: 0 - 4000 m, 11 dB Link Budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz x km \\\ Uplink 2: 0 - 4000 m, 11 dB Link Budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz x km \\\

Network size - cascadibility

Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	10ms (10 switches), 30ms (50 switches), 40ms (100 switches), 60ms (200 switches)

Power requirements

Operating Voltage	2 x 60/120/250 VDC (48 VDC-320 VDC) and 110/230 VAC (90 VAC-265 VAC)
Power consumption	max. 12 W
Power output in BTU (IT)/h	max. 41

Software

Switching	Disable Learning (hub functionality), Independent VLAN Learning, Fast Aging, Static Unicast/Multicast Address Entries, QoS / Port Prioritization (802.1D/p), TOS/DSCP Prioritization, Egress Broadcast Limiter per Port, Flow Control (802.3X), VLAN (802.1Q), GARP VLAN Registration Protocol (GVRP), Double VLAN Tagging (QinQ), Voice VLAN, GARP Multicast Registration Protocol (GMRP), IGMP Snooping/Querier (v1/v2/v3)
Redundancy	Advanced Ring Configuration for MRP, HIPER-Ring (Manager), HIPER-Ring (Ring Switch), Fast HIPER-Ring, Link Aggregation with LACP, Media Redundancy Protocol (MRP) (IEC62439-2), Redundant Network Coupling, Sub Ring Manager, RSTP 802.1D-2004 (IEC62439-1), MSTP (802.1Q), RSTP Guards, RSTP over MRP
Management	Dual Software Image Support, TFTP, LLDP (802.1AB), LLDP-MED, SSHv1, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet
Diagnostics	Management Address Conflict Detection, Address Relearn Detection, MAC Notification, Signal Contact, Device Status Indication, TCPDump, LEDs, Syslog, 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
Configuration	AutoConfiguration Adapter ACA11 Limited Support (RS20/30/40, MS20/30), Automatic Configuration Undo (roll-back), Configuration Fingerprint, BOOTP/DHCP Client with Auto-Configuration, DHCP Server: per Port, DHCP Server: Pools per VLAN, DHCP Server: Option 43, AutoConfiguration Adapter ACA21/22 (USB), HiDiscovery, DHCP Relay with Option 82, Command Line Interface (CLI), CLI Scripting, Full-featured MIB Support, Web-based Management, Context-sensitive Help

Security	IP-based Port Security, MAC-based Port Security, Port-based Access Control with 802.1X, Guest/unauthenticated VLAN, RADIUS VLAN Assignment, Multi-Client Authentication per Port, MAC Authentication Bypass, Access to Management restricted by VLAN, HTTPS Certificate Management, Restricted Management Access, Appropriate Use Banner, SNMP Logging, Local User Management, Remote Authentication via RADIUS, Password change on first login
Time synchronisation	Buffered Real Time Clock, SNTP Client, SNTP Server
Industrial Profiles	EtherNet/IP Protocol, IEC61850 Protocol (MMS Server, Switch Model), PROFINET IO Protocol
Miscellaneous	Manual Cable Crossing
Presettings	Standard

Ambient conditions

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

Mechanical construction

Dimensions (WxHxD)	120 mm x 145 mm x 115 mm
Weight	1 kg
Mounting	DIN Rail
Protection class	IP30

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)	9 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), 2 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 55032	EN 55032 Class A
FCC CFR47 Part 15	FCC 47CFR Part 15, Class A

Approvals

Basis Standard	CE, FCC, EN61131
Safety of industrial control equipment	cUL 508
Hazardous locations	cUL 1604 Class1 Div 2
Shipbuilding	Germanischer Lloyd, BV (RSR20), LR (RSR20)
Substation	IEC 61850-3; IEEE 1613
Transportation	NEMA TS2, EN 50121-4

Scope of delivery and accessories

Accessories	Rail Power Supply RPS 30, RPS 60 or RPS 120, Terminal Cable, Industrial HiVision, Auto configuration adapter (ACA 21-USB)
Scope of delivery	Device, terminal blocks, General safety instructions

regulations based on their individual usage of the product.