



Hirschmann Automation and Control GmbH



RS20-0400M4M4SDAEHH

Industrial Networking:Industrial Ethernet:OpenRail System:Compact:Switches Software Release

Product description	
Description	Fast ETHERNET-switch according to IEEE 802.3 compact, managed, Industrial switch for DIN rail store-and-forward-switching, fanless design, Software Layer 2 Enhanced, ports: 4 x FE
Port type and quantity	4 ports in total; 1. Uplink Port: 100BASE-FX, MM-ST; 2. Uplink Port: 100BASE-FX, MM-ST, 2 x standard 10/100 BASE TX, RJ45
Type	RS20-0400M4M4SDAEHH
Order No.	RS20-0400M4M4SDAEHH
More Interfaces	
Power supply/signaling contact	1 x plug-in terminal block, 6-pin
V.24 interface	1 x RJ11 socket
USB interface	1 x to connect auto-configuration adapter ACA21-USB
Network size - length of cable	
Multimode fiber (MM) 50/125 μ m	0 - 5000 m, 8 dB link budget at 1300 nm, A = 1 d/km, 3 dB reserve, B = 800 MHz x km
Multimode fiber (MM) 62.5/125 μ m	0 - 4000 m, 11 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz x km
Network size - cascability	
Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	50 (reconfiguration time < 0.3 sec.)
Power requirements	
Operating voltage	12/24/48 V DC (9,6-60) V and 24 V AC (18-30) V
Current consumption at 24 V DC	321mA
Current consumption at 48 V DC	161mA
Power output in Btu (IT) h	26.3
Software	
Management	Serial interface, web-interface, SNMP V1/V2, HiVision file transfer SW HTTP/TFTP
Diagnostics	LEDs, log-file, syslog, signal contact, RMON, port mirroring, topology discovery 802.1AB, disable learning
Configuration	Command line interface (CLI), TELNET, BootP, DHCP, DHCP option 82, HiDiscovery, auto-configuration adapter (ACA21-USB, ACA11 read support)
Security	Port security (IP and MAC), SNMP V3 (no encryption)
Redundancy functions	HIPER-ring (ring structure), MRP (IEC-ring functionality), RSTP 802.1w, redundant network/ring coupling, dual homing, redundant 24 V power supply
Filter	QoS 4 classes, prioritisation (IEEE 802.1D/p), VLAN (IEEE 802.1Q), multicast (IGMP snooping/querier), multicast detection unknown multicast, broadcast limiter, fast aging
Industrial Profiles	EtherNet/IP and PROFINET compatible, configuration and diagnostic via automation software tools like e.g. STEP7, or Control Logix
Realtime	SNTP server
Flow control	Flow Control 802.3x, Port Priority 802.1D/p, Priority (TOS/DIFFSERV)
Presettings	Standard
Ambient conditions	
Operating temperature	0° to +60°C
Storage/transport temperature	-40° to +70°C
Relative humidity (non-condensing)	10% to 95%



MTBF

Mechanical construction

Dimensions (W x H x D) 47 x 131 x 111

Mounting DIN Rail

Weight 400 g

Protection class IP20

Mechanical stability

IEC 60068-2-27 shock 15 g, 11 ms duration, 18 shocks

IEC 60068-2-6 vibration 1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13,2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

EMC interference immunity

EN 61000-4-2 electrostatic discharge (ESD) 6 kV contact discharge, 8kV air discharge

EN 61000-4-3 electromagnetic field 10 V/m (80 - 1000 MHz)

EN 61000-4-4 fast transients (burst) 2 kV power line, 1 kV data line

EN 61000-4-5 surge voltage power line: 2kV (line/earth), 1kV (line/line), 1kV data line

EN 61000-4-6 conducted immunity 3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)

EMC emitted immunity

FCC CFR47 Part 15 FCC CFR47 Part 15

EN 55022 EN 55022 Class A

Approvals

Safety of industrial control equipment cUL 508

Hazardous locations cUL 1604 Class1 Div 2

Germanischer Lloyd -

Substation -

Railway norm -

Scope of delivery and accessories

Scope of delivery Device, terminal block, operating manual

Accessories to order separately Rail power supply RPS 30, RPS 80 EEC or RPS 120 EEC, terminal cable, network management HiVision, auto-configuration adapter (ACA21-USB), 19" installation frame