



## RS20-0400M4M4SDAEHH04.0.

Industrial Networking:Industrial Ethernet:OpenRail System:Compact:Switches Software Release 4.0

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	RS20-0400M4M4SDAEHH04.0.
Order No.	RS20-0400M4M4SDAEHH04.0.
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	
Twisted pair (TP)	
Multimode fiber (MM) 50/125 µm	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 µm	0 - 4000 m, 11 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz x km
Single mode fiber (SM) 9/125 µm	
Single mode fiber (LH) 9/125 µm (long haul transceiver)	
Network size - cascading	
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	62.1 years (MIL-HDBK-217F)
<b>Mechanical construction</b>	
Dimensions (W x H x D)	47 x 131 x 111
Mounting	DIN Rail
Weight	400 g
Protection class	IP20
<b>Mechanical stability</b>	
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.
<b>EMC interference immunity</b>	
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)
<b>EMC emitted immunity</b>	
FCC CFR47 Part 15	FCC CFR47 Part 15
EN 55022	EN 55022 Class A
<b>Approvals</b>	
Safety of industrial control equipment	cUL 508
Hazardous locations	cUL 1604 Class1 Div 2
Germanischer Lloyd	-
Substation	-
Railway norm	-
<b>Scope of delivery and accessories</b>	
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