



## RS20-2400M2M2EDHPHH03.0.

Industrial Networking:Industrial Ethernet:OpenRail System:Compact:Switches 3.0

Product description	
Description	ETHERNET/Fast ETHERNET-switch according to IEEE 802.3 compact, managed, Industrial switch for DIN rail store-and-forward-switching, fanless design, Software Layer 2 Professional
Port type and quantity	24 ports in total; 1. Uplink Port: 100BASE-FX, MM-SC; 2. Uplink Port: 100BASE-FX, MM-SC, 22 standard 10/100 BASE TX, RJ45
Type	RS20-2400M2M2EDHPHH03.0.
Order No.	RS20-2400M2M2EDHPHH03.0.
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	
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
Network size - cascading	
Line - / star topology	any
Ring structure (HIPER-Ring)	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	663mA
Current consumption at 48 V DC	332mA
Power output in Btu (IT) h	54.3
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, cable diagnostic (TX), 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, SSH, authentication (802.1x)
Redundancy functions	HIPER-ring (ring structure), MRP (IEC-ring functionality), RSTP 802.1w, redundant network/ring coupling, dual homing, link aggregation, 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-, unicast-, multicast limiter, fast aging, GMRP IEEE 802.1D
Industrial Profiles	Configuration and diagnostic via automation software tools like e.g. STEP7, or Control Logix
Realtime	SNTP server, realtime clock with energy buffer
Flow control	Flow control 802.3x, port priority 802.1D/p, priority (TOS/DIFFSERV), prio (MAC/IP), prio mapping (TOS Layer2), traffic shaping (unicast, multicast, broadcast) ingress / egress
Ambient conditions	
Operating temperature	-40° to +70°C
Storage/transport temperature	-40° to +85°C

Relative humidity (non-condensing)	10% to 95%
MTBF	31.8 years
<b>Mechanical construction</b>	
Dimensions (W x H x D)	110 x 131 x 111
Mounting	DIN Rail
Weight	650 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
Germanischer Lloyd	German Lloyd
Substation	IEC 61850-3, IEEE 1613
Railway norm	EN 50121-4
<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