



**Product:** RS20-0400M2M2SDAE

**Configurator:** RS20/30/40 Managed Switches

### Configurator Description

Fast Ethernet Ports with/without PoE The RS20 compact OpenRail managed Ethernet switches can accommodate from 4 to 25 port densities and are available with different Fast Ethernet uplink ports – all copper, or 1, 2 or 3 fiber ports. The fiber ports are available in multimode and/or singlemode. Gigabit Ethernet Ports with/without PoE The RS30 compact OpenRail managed Ethernet switches can accommodate from 8 to 24 port densities with 2 Gigabit ports and 8, 16 or 24 Fast Ethernet ports. The configuration includes 2 Gigabit ports with TX or SFP slots. The RS40 compact OpenRail managed Ethernet switches can accommodate 9 Gigabit ports. The configuration includes 4 x Combo Ports (10/100/1000BASE TX RJ45 plus FE/GE-SFP slot) and 5 x 10/100/1000BASE TX RJ45 ports

### Technical Specifications

#### Product description

Description	Managed Fast-Ethernet-Switch for DIN rail store-and-forward-switching, fanless design ; Software Layer 2 Enhanced
Part Number	943434001
Port type and quantity	4 ports in total: 2 x standard 10/100 BASE TX, RJ45 ; Uplink 1: 1 x 100BASE-FX, MM-SC ; Uplink 2: 1 x 100BASE-FX, MM-SC

#### 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 USB to connect auto-configuration adapter ACA21-USB

#### Network size - length of cable

Twisted pair (TP)	Port 1 - 4: 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 - cascading

Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	50 (reconfiguration time 0.3 sec.)

#### Power requirements

Operating Voltage	12/24/48V DC (9,6-60)V and 24V AC (18-30)V (redundant)
Power consumption	max. 7.7 W
Power output in BTU (IT)/h	max. 26.3

#### 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), IGMP Snooping/Querier (v1/v2/v3)
Redundancy	HIPER-Ring (Manager), HIPER-Ring (Ring Switch), Media Redundancy Protocol (MRP) (IEC62439-2), Redundant Network Coupling, RSTP 802.1D-2004 (IEC62439-1), RSTP Guards, RSTP over MRP
Management	TFTP, LLDP (802.1AB), V.24, HTTP, Traps, SNMP v1/v2/v3, Telnet
Diagnostics	Management Address Conflict Detection, Address Relearn Detection, Signal Contact, Device Status Indication, LEDs, Syslog, Duplex Mismatch Detection, RMON (1,2,3,9), Port Mirroring 1:1, Port Mirroring 8:1, System Information, Self-Tests on Cold Start, SFP Management, 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, AutoConfiguration Adapter ACA21/22 (USB), HiDiscovery, DHCP Relay with Option 82, Command Line Interface (CLI), Full-featured MIB Support, Web-based Management, Context-sensitive Help
Security	IP-based Port Security, MAC-based Port Security, Access to Management restricted by VLAN, SNMP Logging, Local User Management, Password change on first login

Time synchronisation	SNTP Client, SNTP Server
Industrial Profiles	EtherNet/IP Protocol, 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)	47 mm x 131 mm x 111 mm
Weight	400 g
Mounting	DIN Rail
Protection class	IP20

### 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)	6 kV contact discharge, 8 kV 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: 2 kV (line/earth), 1 kV (line/line), 1 kV data line
EN 61000-4-6 Conducted Immunity	3 V (10 kHz-150 kHz), 10 V (150 kHz-80 MHz)

### 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	cULus ISA12.12.01 class1 div.2 (cUL 1604 class1 div.2)

### Scope of delivery and accessories

Accessories	Rail Power Supply RPS30, RPS60, RPS90 or RPS120, Terminal Cable, Network Management Software Industrial HiVision, Auto configuration adapter (ACA21-USB), 19"-DIN rail adapter
Scope of delivery	Device, terminal block, General safety instructions

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