



RS20-1600M2M2SDAEHH01.0.

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

Product description

Description	Redundancy Industrial ETHERNET Rail Switch, Layer 2 Switch with Software Enhanced, Ethernet (10 Mbit/s) and Fast-Ethernet (100 Mbit/s)
Port type and quantity	14 x 10/100BASE-TX, TP cable, RJ45 sockets, auto-crossing, auto-negotiation, auto-polarity, 2 x 100BASE-FX, MM cable, SC sockets
Type	RS20-1600M2M2SDAEHH01.0.
Order No.	943 434-005

More Interfaces

Power supply/signaling contact	1 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)	0 - 100 m
-------------------	-----------

Network size - cascability

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

Power requirements

Operating voltage	9.6 to 60 V DC and 18 to 30 V AC
Current consumption at 24 V DC	max. 490 mA

Service

	serial interface, web interface, SNMP V1/V2/V3, HiVision, file transfer SW HTTP/TFTP
Diagnostics	LEDs (power, link status, data, 100 Mbit/s, auto-negotiation, full-duplex, error, redundancy management, ring-port, LED-test), signal contact (24V DC / 1 A), syslog, logfile, RMON, port mirroring, Topology Discovery IEEE 802.1AB (LLDP)
Configuration	command line interface (CLI), TELNET, BootP, DHCP, DHCP Option 82, HiDiscovery, auto-configuration adapter (ACA21-USB)
Security	port-security (MAC- and IP-addresses), access control to agent (VLAN/IP)
Other services	QoS 4 classes, prioritisation (IEEE 802.D/p), VLAN (IEEE 802.1Q), multicast (IGMP snooping/querier), broadcastlimiter, fast aging, flow control IEEE 802.3x, PTP client (Precision Time Protocol, IEEE 1588), SNTP (Simple Network Time Protocol)

Redundancy

Redundancy functions	HIPER-Ring (ring structure), RSTP IEEE 802.1w (rapid spanning tree protocol), redundant network/ring coupling (master/receiver functionality), dual homing (master/receiver functionality), redundant 24 V power supply
----------------------	---

Ambient conditions

Operating temperature	0 °C to +60 °C
Storage/transport temperature	-40 °C to +70 °C
Relative humidity (non-condensing)	10% to 95%
MTBF	22.2 years; MIL-HDBK 217F: Gb 25 °C

Mechanical construction

Dimensions (W x H x D)	110 mm x 131 mm x 111 mm
Mounting	DIN Rail 35 mm
Weight	600 g
Protection class	IP 20

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.; 0.7 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
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	
FCC CFR47 Part 15	FCC CFR47 Part 15 Class A
EN 55022	EN 55022 Class A
Approvals	
Safety of industrial control equipment	cUL 508 (pending)
Hazardous locations	cUL 1604 Class 1 Div 2 (pending)
Scope of delivery and accessories	
Scope of delivery	device, terminal block, operating manual
Accessories to order separately	rail power supply RPS 30, RPS 60 or RPS 120, terminal cable, HiVision network management, auto-configuration adapter (ACA21-USB), 19" installation frame