




## Product information Compact OpenRail Fast Ethernet Switch 4-25 ports - RS20-1600T1T1SDAPHH09.0.

Industrial Ethernet: Compact configurable managed switches: Managed Industrial Ethernet RS20/30/40 Switches : Compact OpenRail Fast Ethernet Switch 4-25 ports

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<b>Name</b>	Compact OpenRail Fast Ethernet Switch 4-25 ports
	
	16 port Fast-Ethernet-Switch, managed, software Layer 2 Professional, for DIN rail store-and-forward-switching, fanless design
<b>Delivery informations</b>	
<b>Availability</b>	available
<b>Product description</b>	
<b>Description</b>	16 port Fast-Ethernet-Switch, managed, software Layer 2 Professional, for DIN rail store-and-forward-switching, fanless design
<b>Port type and quantity</b>	16 ports in total; 1. uplink: 10/100BASE-TX, RJ45; 2. uplink: 10/100BASE-TX, RJ45; 14 x standard 10/100 BASE TX, RJ45
<b>Type</b>	RS20-1600T1T1SDAPHH09.0.
<b>Order No.</b>	943 434-024
<b>More Interfaces</b>	
<b>Power supply/signaling contact</b>	1 x plug-in terminal block, 6-pin
<b>V.24 interface</b>	1 x RJ11 socket
<b>USB interface</b>	1 x USB to connect the AutoConfiguration Adapter ACA21-USB
<b>Network size - length of cable</b>	
<b>Twisted pair (TP)</b>	0 m ... 100 m
<b>Network size - cascading</b>	
<b>Line - / star topology</b>	any
<b>Ring structure (HIPER-Ring) quantity switches</b>	50 (reconfiguration time < 0.3 sec.)
<b>Power requirements</b>	
<b>Operating voltage</b>	12/24/48 V DC (9,6-60) V and 24 V AC (18-30) V (redundant)
<b>Current consumption at 24 V DC</b>	392 mA
<b>Current consumption at 48 V DC</b>	196 mA
<b>Power output in Btu (IT) h</b>	32.1
<b>Software</b>	
<b>Management</b>	Dual Software Image Support; TFTP; LLDP (802.1AB); LLDP-MED; SSHv1; SSHv2; V.24; HTTP; HTTPS; Traps; SNMP v1/v2/v3; Telnet
<b>Diagnostics</b>	Management Address Conflict Detection; Address Relearn Detection; MAC Notification; Signal Contact; Device Status Indication; TCPDump; LEDs; Syslog; Port Monitoring with Auto-Disable; Link Flap Detection; Overload Detection; Duplex Mismatch Detection; RMON (1,2,3,9); Port Mirroring 1:1; Port Mirroring 8:1; Port Mirroring N:1; System Information; Self-Tests on Cold Start; Copper Cable Test; SFP Management; Configuration Check Dialog; Switch Dump; Link Speed and Duplex Monitoring
<b>Configuration</b>	AutoConfiguration Adapter ACA11 Limited Support (RS20/30/40, MS20/30); Automatic Configuration Undo (roll-back); Configuration Fingerprint; BOOTP/DHCP Client with Auto-Configuration; DHCP Server: per Port; DHCP Server: Pools per VLAN; DHCP Server: Option 43; AutoConfiguration Adapter ACA21/22 (USB); HiDiscovery; DHCP Relay with Option 82; Command Line Interface (CLI); CLI Scripting; Full-featured MIB Support; Web-based Management; Context-sensitive Help
<b>Security</b>	IP-based Port Security; MAC-based Port Security; Port-based Access Control with 802.1X; Guest/unauthenticated VLAN; RADIUS VLAN Assignment; Multi-Client Authentication per Port; MAC Authentication Bypass; Access to Management restricted by VLAN; HTTPS Certificate Management; Restricted Management Access; Appropriate Use Banner; SNMP Logging; Local User Management; Remote Authentication via RADIUS
<b>Redundancy functions</b>	Advanced Ring Configuration for MRP; HIPER-Ring (Manager); HIPER-Ring (Ring Switch); Fast HIPER-Ring; Link Aggregation with LACP; Media Redundancy Protocol (MRP) (IEC62439-2); Redundant Network Coupling; RSTP 802.1D-2004 (IEC62439-1); MSTP (802.1Q); RSTP Guards; RSTP over MRP
<b>Industrial Profiles</b>	EtherNet/IP Protocol; PROFINET IO Protocol
<b>Time synchronisation</b>	SNTP server and client, Buffered RTC
<b>Miscellaneous</b>	Manual Cable Crossing
<b>Switching</b>	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); GARP VLAN Registration Protocol (GVRP); Double VLAN Tagging (QinQ); Voice VLAN; GARP Multicast Registration Protocol (GMRP); IGMP Snooping/Querier (v1/v2/v3)



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### Ambient conditions

Operating temperature	0 °C ... 60 °C
Storage/transport temperature	-40 °C ... 70 °C
Relative humidity (non-condensing)	10 % ... 95 %
MTBF	41.9 years (MIL-HDBK-217F)
Protective paint on PCB	No

### Mechanical construction

Dimensions (W x H x D)	110 mm x 131 mm x 111 mm
Mounting	DIN Rail
Weight	600 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.; 0.7 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 47 CFR Part 15 Class A
EN 55022	EN 55022 Class A

### Approvals

Safety of industrial control equipment	cUL 508
Hazardous locations	ISA 12.12.01 Class 1 Div. 2
Shipbuilding	n/a
Railway norm	n/a
Substation	n/a

### Scope of delivery and accessories

Scope of delivery	Device, terminal block, operating manual
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For more information please contact:

**Hirschmann Automation and Control GmbH**

Stuttgarter Strasse 45-51

72654 Neckartenzlingen

Germany

Phone: +49 7127/14-1809

E-Mail: [inet-sales@belden.com](mailto:inet-sales@belden.com)

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