




## Product information Compact OpenRail Fast Ethernet Switch 4-25 ports - RS20-1600S2S2TDAPHH07.0.

Industrial Ethernet: Compact configurable managed switches: with Firmware Release 7: Compact OpenRail Fast Ethernet Switch 4-25 ports

<http://www.e-catalog.beldensolutions.com/link/57078-24455-49854-173491-173293/en/RS20-1600S2S2TDAPHH07.0/ui/state>

<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: 100BASE-FX, SM-SC; 2. uplink: 100BASE-FX, SM-SC; 14 x standard 10/100 BASE TX, RJ45
<b>Type</b>	RS20-1600S2S2TDAPHH07.0.
<b>Order No.</b>	RS20-1600S2S2TDAPHH07.0.
<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>Single mode fiber (SM) 9/125 µm</b>	0 - 32,5 km, 16 dB link budget at 1300 nm, A = 0,4 dB/km, 3 dB reserve, D = 3,5 ps/(nm x km)
<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>	492 mA
<b>Current consumption at 48 V DC</b>	246 mA
<b>Power output in Btu (IT) h</b>	40.3
<b>Software</b>	
<b>Management</b>	Serial interface, web-interface, SNMP V1/V2, HiVision file transfer SW HTTP/TFTP, LLDP-MED, Voice VLAN
<b>Diagnostics</b>	LEDs, log-file, syslog, relay contact, RMON, port mirroring 1:1 and n:1, topology discovery 802.1AB, cable tester (TX), address conflict detection, network error detection, SFP diagnostic (temperature, optical input and output power, power in dBm), Trap for configuration saving and changing, duplex mismatch detection, disable learning, Port Monitor
<b>Configuration</b>	Command line interface (CLI), TELNET, BootP, DHCP, DHCP option 82, HiDiscovery, easy device exchange with auto-configuration adapter ACA21-USB (automatic software and/or configuration upload), automatic script load from ACA21, integrated DHCP server per port, automatic invalid configuration undo, Offline Configuration, SFP Whitelist, ARC automatic ring configuration (MRP), automatic port shutdown (link flapping)
<b>Security</b>	Port Security (IP und MAC) with multiple addresses(50 MACs per port), SNMP V3, SSH, Authentication (IEEE802.1x), 802.1x Multi Client Authentication, Guest VLAN and Unauthenticated VLAN, Port based Radius VLAN assignment
<b>Redundancy functions</b>	HIPER-Ring, MRP, MSTP, RSTP - IEEE802.1D-2004, MRP and RSTP in parallel, link aggregation
<b>Filter</b>	QoS 4 classes, prioritisation (IEEE 802.1D/p), VLAN (IEEE 802.1Q), Voice VLAN, shared VLAN learning, Q-in-Q double VLAN tagging, multicast IGMP v1/v2/v3 (snooping/querier), multicast detection unknown multicast, broadcast-, unicast-, multicast limiter, fast aging, GMRP IEEE 802.1D
<b>Industrial Profiles</b>	EtherNet/IP and PROFINET (2.2 PDEV, GSDML stand-alone generator, automatic device exchange) profiles included, configuration and diagnostic via automation software tools like e.g. STEP7, or Control Logix
<b>Time synchronisation</b>	SNTP client/server, PTP / IEEE 1588, realtime watch with energy buffer
<b>Flow control</b>	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
<b>Presettings</b>	Standard
<b>Ambient conditions</b>	
<b>Operating temperature</b>	-40 °C ... 70 °C
<b>Storage/transport temperature</b>	-40 °C ... 85 °C



## Industrial Ethernet: Compact configurable managed switches: with Firmware Release 7: Compact OpenRail Fast Ethernet Switch 4-25 ports

<http://www.e-catalog.beldensolutions.com/link/57078-24455-49854-173491-173293/en/RS20-1600S2S2DAPHH07.0./uistate>

Relative humidity (non-condensing)	10 % ... 95 %
MTBF	26.4 years (MIL-HDBK-217F)
Protective paint on PCB	No
<b>Mechanical construction</b>	
Dimensions (W x H x D)	110 mm x 131 mm x 111 mm
Mounting	DIN Rail
Weight	600 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.; 0.7 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
<b>EMC interference immunity</b>	
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)
<b>EMC emitted immunity</b>	
FCC CFR47 Part 15	FCC 47 CFR Part 15 Class A
EN 55022	EN 55022 Class A
<b>Approvals</b>	
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
<b>Scope of delivery and accessories</b>	
Scope of delivery	Device, terminal block, operating manual

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)

The information published in the websites has been compiled as carefully as possible. It is subject to alteration without notice in technical as well as in price-related/commercial respect. The complete information and data were available on user documentation. Mandatory information can only be obtained by a concrete query.