



# HIRSCHMANN

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## New Product Bulletin

NP 1008HE

### Hirschmann™ RSB20

Cost-efficient solutions for a wide range of different applications: The new Hirschmann™ RSB20 family



### The Hirschmann™ RSB20 Family: A Versatile Range of Managed Basic Switches

The new Hirschmann™ RSB20 family comprises 32 different models distinguished by the number and type of ports offered as well as by their factory settings for EtherNet/IP and specific operating temperature ranges. For the first time, this provides an entry into the segment of managed switches at an attractive cost level, since customers will pay only for their exact equipment needs. The RSB20 portfolio permits customized communications solutions without any compromises in quality.

This includes special versions optimized for specific applications as well as a "universal version" with 3 SFP ports. The flexible adaptation to any application also reduces stock keeping.

### Application Areas

Even at the lower entry level, i.e. for smaller networks in mechanical engineering and automation technology, the adaptability and versatility of the RSB switches opens doors without having to settle for the entire scope of available management functions. For this reason, Belden has introduced the "lean" solution of Hirschmann™ RSB20 Basic Switches, maximizing individual performance features for a perfect fit in virtually any cost-efficient automation application.

### Key Features of the RSB Basic Switch Family

- Optimized cost/performance ratio
- Ideal range of function for redundant networks
- Various different models, from the 8TX port version up to a flexible type with 3 FE SFP uplink ports
- Comprehensive redundancy features



Versatile and cost-efficient solution for use in various different application areas

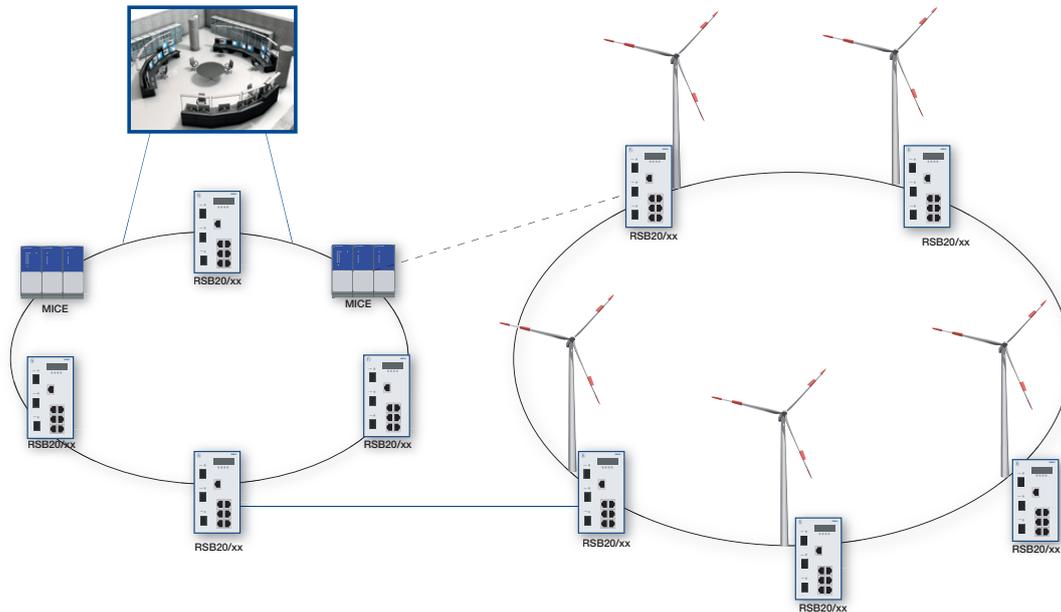
All 32 models of the Hirschmann™ RSB20 family of Basic Switches support Fast Ethernet (10/100 BASE-TX, 100 BASE-FX) and offer both comprehensive management and redundancy modes as well as various different functions for convenient configuration and diagnostics. Furthermore, they meet all current industrial standards and have cUL508 and cUL1604 Class 1 Div2 approvals. Supplied in a rugged and compact housing, they can be mounted on top-hat rails.

Passive cooling (no fans) and a redundant 12/24VDC power supply add to ensure high operational safety. All configuration data can be saved and recalled, if required, through a serial interface connecting to the ACA 11 auto-configuration adapter.

### Product Features

- 8 and 9 port versions (10/100 BASE-TX, 100 BASE-FX)
- Maximum flexibility due to fiber uplinks (SM/MM) and SFP transceivers
- Factory presets for EtherNet/IP
- Temperature ranges from 0 to +60 °C or -40 to +70 °C
- High operational safety based on passive cooling and redundant 12/24VDC power supply
- Comprehensive management and redundancy modes
- Various different configuration and diagnostic functions
- Compliance with all current industrial standards
- Approvals according to cUL508 and cUL1604 Class 1 Div2

### Managed 8/9 Port RSB Switches





## Technical Data

Product Description	
Product designation	RSB20-xx
Key features	Ethernet/Fast Ethernet managed industrial switch acc. to IEEE 802.3, store-and-forward switching, compact design for Din rail mounting, passive cooling, Layer 2 Basic software
Types and numbers of ports	Fast-Ethernet ports total: 8; 9 8x 10/100BASE TX; 6x 10/100BASE TX plus 2x 100BASE FXSC MM (SM) 8x 10/100BASE TX plus 1x 100BASE FXSC MM (SM); 6x 10/100BASE TX plus 3x 100BASE FXSC MM (SM) 6x 10/100BASE TX plus 3x FE SFP slots
Further Interfaces	
Power supply / signaling contact	1x plug-in screw-type terminal, 6 pins
V.24 access	1x RJ11 female connector
Network Reach / Wiring Distance	
Twisted Pair (TP)	0 – 100m
Multi-mode fiber (MM) 50/125 µm	0-5,000 m, 8 dB link budget at 1,300 nm, A = 1 dB/km, 3 dB buffer (fiber version)
Multi-mode fiber (MM) 62.5/125 µm	0-4,000m, 11 dB link budget at 1,300 nm, A = 1 dB/km, 3 dB buffer (fiber version)
Single-mode fiber (SM) 9/125 µm	0-32.5 km, 16 dB link budget at 1,300 nm, A = 0.4 dB/km, 3 dB buffer (fiber version)
SFP	Depending on SFP version
Network Cascading Depth	
Line/Star topology	Any
Ring structure	100 (<0.3 sec reconfiguration time)
Power Supply	
Operating voltage	12/24 VDC (9.6V to 32V)
24VDC current draw	215 mA (plus 50 mA/fiber port)
Power output in BTU(IT)/h	18 (plus 4/fiber port)
Software	
Management	Serial interface, web interface, SNMP v1/v2, HiVision, file transfer per HTTP/TFTP
Diagnostics	LEDs, log file, relay contact, RMON, port mirroring, 802.1AB topology discovery
Configuration	Command Line Interface (CLI), BootP, DHCP, DHCP option 82, HiDiscovery ACA11 auto-configuration adaptor, HTTP/TFTP file transfer configuration
Redundancy functions	HIPER-Ring (Manager and Client), MRP (Manager and Client), RSTP
Filter	QoS 4 classes, Port Priority (IEEE 802.1D/p), Multicast (IGMP snooping and query), fast aging
Real-time	SNTP Client and Server, PTP IEEE 1588 v1, v2 Client
Environmental Conditions	
Operating temperature range	0°C to +60 °C; optionally -40°C to +70 °C (EEC)
Storage/Transportation temperature range	-40°C to +70°C; -40°C to 85°C (EEC)
PCB coating	Optional
Relative humidity (non-condensing)	10 to 95 %
MTBF (MIL HDBK-217F)	>60 years
Design	
Dimensions (WxHxD)	8TX version: 47x131x111 mm All other versions: 74x131x111 mm
Mounting	DIN rail
Weight	400 g
Protection class	IP20
Approvals	
Safety for industrial control equipment	cUL 508 (pending)
Hazardous locations	cUL 1604 class 1 Div 2 (pending)



## Ordering Information

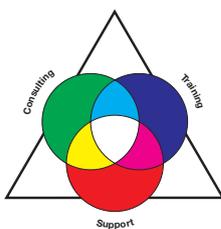
Product Designation	Type	Ordering Number
RSB20-0800T1T1SAAB	8TX	942 014 001
RSB20-0800M2M2SAAB	6TX/2FX MM	942 014 002
RSB20-0800S2S2SAAB	6TX/2FX SM	942 014 003
RSB20-0900ZZZ6SAAB	6TX/3SFP	942 014 004
RSB20-0900M2TTSAAB	8TX/1FX MM	942 014 005
RSB20-0900S2TTSAAB	8TX/1FX SM	942 014 006
RSB20-0900MMM2SAAB	6TX/3FX MM	942 014 007
RSB20-0900VVM2SAAB	6TX/2FX SM/1 FX MM	942 014 008
RSB20-0800T1T1TAAB	8TX EEC	942 014 009
RSB20-0800M2M2TAAB	6TX/2FX MM EEC	942 014 010
RSB20-0800S2S2STAB	6TX/2FX SM EEC	942 014 011
RSB20-0900ZZZ6TAAB	6TX/3SFP EEC	942 014 012
RSB20-0900M2TTAAB	8TX/1FX MM EEC	942 014 013
RSB20-0900S2TTAAB	8TX/1FX SM EEC	942 014 014
RSB20-0900MMM2TAAB	6TX/3FX MM EEC	942 014 015
RSB20-0900VVM2TAAB	6TX/2FX SM/1 FX MM EEC	942 014 016

## Always the Right Solution

Belden is one of the world's leading suppliers of signal transmission solutions including cable, connectivity and active components for mission-critical applications ranging from industrial automation to data centers, broadcast studios, and aerospace. Belden offers an extensive and highly specialized product portfolio of signal transmission solutions for information, control and field levels, which the company produces and markets under its proprietary Belden®, Hirschmann™ and Lumberg Automation™ brands.

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You can also contact our sales team directly by dialing +49 7127 14 1809.



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