



**HIRSCHMANN**

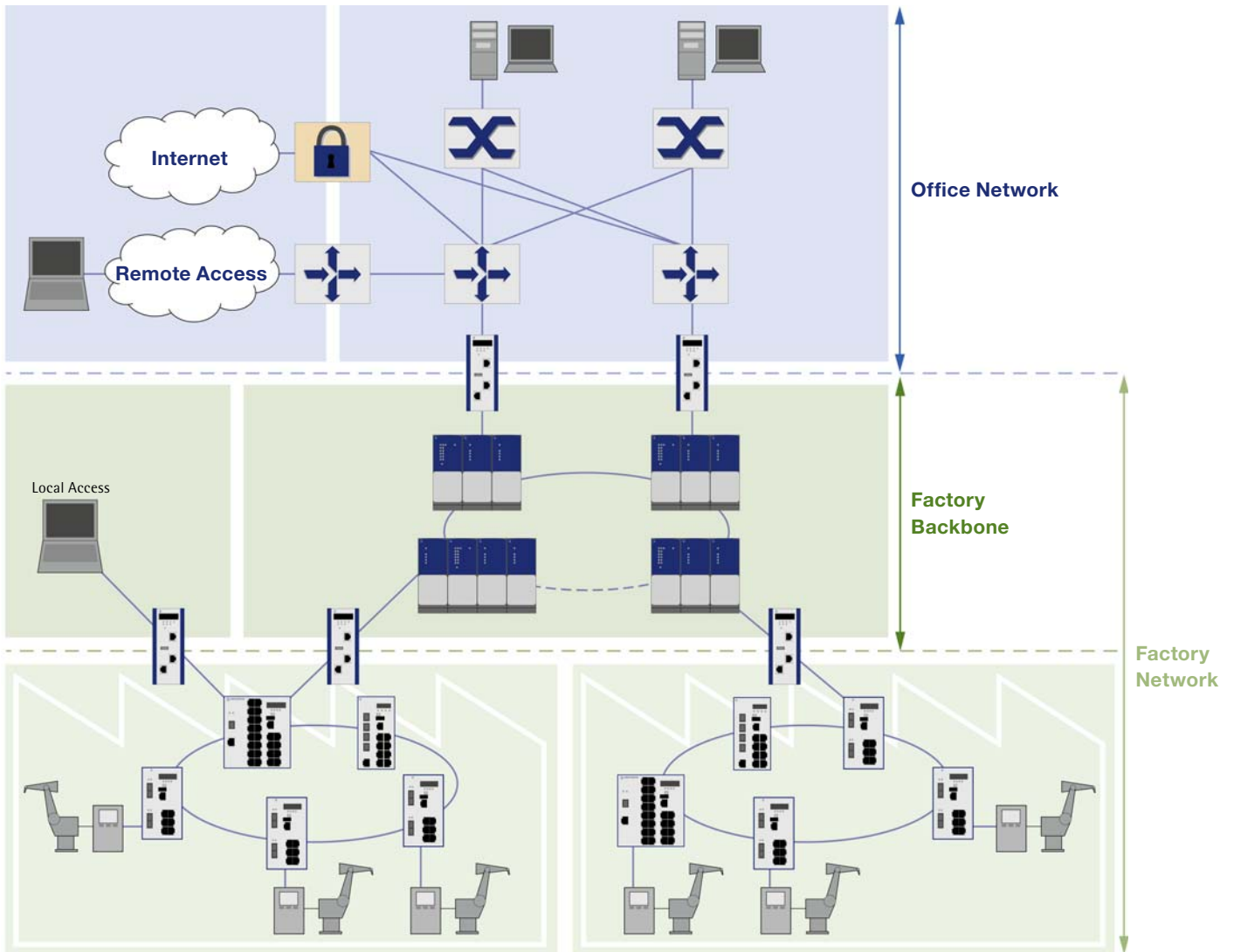
A **BELDEN** BRAND

## EAGLE20 Security Router



**The new industrial security router –  
now with a new ruggedized housing  
and new EAGLE Software 4.3.**

## Tomorrow's distributed security solution: EAGLE20.








### Times change, and so does your network equipment:

The new future-proof EAGLE20 generation from Hirschmann™ offers all the essential features of a security router including a new ruggedized metal housing and VxWorks-based EAGLE Software 4.3 in a choice of five versions. VPN functionality is built in right from the start.

universal security module at the machine level where security requirements are becoming increasingly complex. The EAGLE20 protects sensitive areas of your production process and supports long-term integration of Office IT and Industrial IT networks in the company wide environment.






The new EAGLE20 routers can be used to upgrade your security by splitting your company network into compartments. The EAGLE20 also acts as a



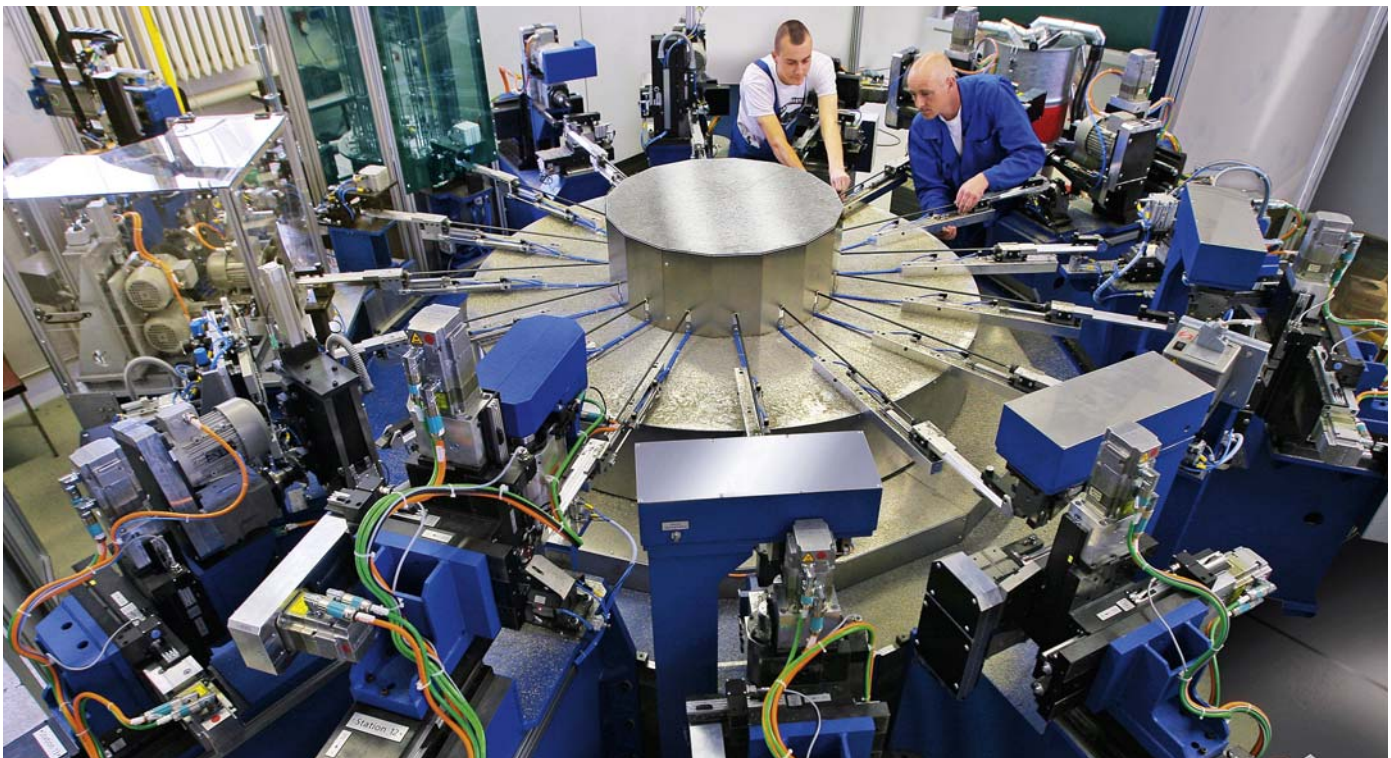
EAGLE20					
Product description	EAGLE20 TX/TX	EAGLE20 TX/MM	EAGLE20 TX/SM	EAGLE20 MM/TX	EAGLE20 MM/MM
					
<b>Order No.</b>	943 987-001	943 987-002	943 987-003	943 987-004	943 987-005
<b>Description</b>	Industrial Firewall/VPN router				
<b>Modi</b>	Router, Multi Client Transparent (MCT), PPPoE				
<b>Port type and quantity</b>	Trusted port: 1 x 10/100BASE-TX, TP cable, RJ45 socket, autocrossing, autonegotiation, autopolarity Untrusted port: 1 x 10/100BASE-TX, TP cable, RJ45 socket, autocrossing, autonegotiation, autopolarity	Trusted port: 1 x 10/100BASE-TX, TP cable, RJ45 socket, autocrossing, autonegotiation, autopolarity Untrusted port: 1 x 100BASE-FX, MM cable, SC socket	Trusted port: 1 x 10/100BASE-TX, TP cable, RJ45 socket, autocrossing, autonegotiation, autopolarity Untrusted port: 1 x 100BASE-FX, SM cable, SC socket	Trusted port: 1 x 100BASE-FX, MM cable, SC socket Untrusted port: 1 x 10/100BASE-TX, TP cable, RJ45-socket, autocrossing, autonegotiation, autopolarity	Trusted port: 1 x 100BASE-FX, MM cable, SC socket Untrusted port: 1 x 100BASE-FX, MM cable, SC socket
<b>More interfaces</b>					
<b>Power supply/signal contact</b>	1 x plug-in terminal block, 6-pin				
<b>V.24 interface</b>	1 x RJ11 socket, serial interface for device configuration				
<b>USB interface</b>	1 x USB socket to connect auto configuration adapter ACA 21-USB				
<b>Network size – length of cable</b>					
<b>Twisted Pair (TP)</b>	0–100 m	0–100 m	0–100 m	0–100 m	–
<b>Multimode fiber (MM) 50/125 µm</b>	–	0–5000 m, 8 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 800 MHz x km	–	0–5000 m, 8 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 800 MHz x km	0–5000 m, 8 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 800 MHz x km
<b>Multimode fiber (MM) 62.5/125 µm</b>	–	0–4000 m, 11 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz x km	–	0–4000 m, 11 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz x km	0–4000 m, 11 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz x km
<b>Singlemode 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>Security</b>					
<b>Stateful Inspection firewall</b>	Firewall rules (incoming/outgoing, modem access, management), IP masquerading, 1-to-1 NAT, DoS limiter, MAC filter, user firewall for external activation of FW rules				
<b>Multipoint VPN</b>	IPSec, IKEv2, DES, 3DES, AES (-128, -192, -256), Pre-Shared Key, X.509v3 certificates, MD5, SHA-1, NAT-T, Firewall rules for every VPN connection, configuration assistant in the web interface, remote enable/disable of connections				
<b>Power requirements</b>					
<b>Operating voltage</b>	9.6 up to 60 VDC, 18 up to 30 VAC				
<b>Power consumption</b>	at 24 VDC max. 6.9 W	at 24 VDC max. 8.1 W	at 24 VDC max. 8.1 W	at 24 VDC max. 8.1 W	at 24 VDC max. 9.5 W
<b>Service</b>					
<b>Management</b>	Command Line Interface (CLI), web interface, auto configuration adapter (ACA 21-USB), DHCP, HiDiscovery, Industrial HiVision				
<b>Diagnostics</b>	LEDs (power, link status, data, error, ACA, V24), signal contact (24 VDC / 1 A), log file, syslog, configuration check				
<b>Protocols</b>	Serial, HTTPS, SSH, SNMP (v1/v2/v3), LLDP				
<b>Other services</b>	DHCP server/client, DHCP Relay/Option 82, DynDNS, firewall access via V.24 (PPP), SNTP, VLAN support (IEEE 802.1Q), port forwarding				
<b>Redundancy</b>					
<b>Redundancy functions</b>	Use in redundant network-/ring coupling, firewall redundancy (Layer 4), redundant 24 V power inputs				
<b>Ambient conditions</b>					
<b>Operating temperature</b>	–40° C up to +60° C				
<b>Storage/transport temperature</b>	–40° C up to +70° C				
<b>Relative humidity</b>	10 % up to 95 % (non-condensing)				
<b>MTBF</b>	27.4 years; MIL-HDBK 217F: Gb + 25° C	26.6 years; MIL-HDBK 217F: Gb + 25° C	25.2 years; MIL-HDBK 217F: Gb + 25° C	26.5 years; MIL-HDBK 217F: Gb + 25° C	25.7 years; MIL-HDBK 217F: Gb + 25° C
<b>Mechanical construction</b>					
<b>Dimensions (W x H x D)</b>	60 mm x 145 mm x 125 mm				
<b>Mounting</b>	DIN rail 35 mm				
<b>Weight</b>	600 g	615 g	615 g	615 g	630 g
<b>Protection class</b>	IP20				





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<b>Mechanical stability</b>					
<b>IEC 60068-2-27 shock</b>	15 g, 11 ms duration, 18 shocks				
<b>IEC 60068-2-6 vibration</b>	1 mm, 2–13.2 Hz, 90 min.; 0.7g, 13.2–100 Hz, 90 min.; 3.5 mm, 3–9 Hz, 10 cycles, 1 octave/min.; 1 g, 9–150 Hz, 10 cycles, 1 octave/min.				
<b>EMC interference immunity</b>					
<b>EN 61000-4-2 electrostatic discharge (ESD)</b>	6 kV contact discharge, 8 kV air discharge				
<b>EN 61000-4-3 electromagnetic field</b>	10 V/m (80–2000 MHz)				
<b>EN 61000-4-4 fast transients (burst)</b>	2 kV power line, 1 kV data line				
<b>EN 61000-4-5 surge voltage</b>	Power line: 2 kV (line/earth), 1 kV (line/line)				
<b>EN 61000-4-6 conducted immunity</b>	3 V (10 kHz–150 kHz), 10 V (150 kHz–80 MHz)				
<b>EMC emitted immunity</b>					
<b>EMC emitted immunity</b>	FCC CFR47 part 15 class A; EN 55022 class A				
<b>Approvals</b>					
<b>Safety of industrial control equipment</b>	cUL 508 (pending)				
<b>German Lloyd</b>	German Lloyd (pending)				
<b>Scope of delivery and accessories</b>					
<b>Scope of delivery</b>	Device, terminal block, operating instructions, CD-manual				
<b>Accessories*</b>	Rail power supply RPS 30, RPS 80 EEC, RPS 120 EEC, terminal cable, network management Industrial HiVision, modem cable, auto configuration adapter ACA 21-USB, 19" rack mount kit				

\*must be ordered separately





## EAGLE20 – playing it safe in industrial environments.

EAGLE20 family routers are deployed as “industrial firewalls” at the machine and subsystem level. They offer unparalleled simplicity and reliability, providing local support for the full range of control applications, remote operation, simple links to adjacent processes and VPN connectivity between multiple machines. Five devices – one software solution.

### Five versions – one Software

- EAGLE20 TX/TX
- EAGLE20 TX/MM
- EAGLE20 TX/SM
- EAGLE20 MM/TX
- EAGLE20 MM/MM

High-performance industrial security router

Hardware-based VPN encryption

Distributed security system

DIN rail mounted

Intuitive user interface

Simple integration into existing networks without interrupting production

Ruggedized design for industrial environments

Redundant ring topology (Layer 2) or virtual firewall interface (Layer 3)

EAGLE Software 4.3 is based on the operating system VxWorks, Firewall with stateful packet inspection engine

NAT (Network Address Translation), port forwarding and full 1:1 NAT functionality





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[www.hirschmann.com](http://www.hirschmann.com)

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