



HIRSCHMANN

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New Product Bulletin

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Hirschmann™ EAGLE20-0400 and EAGLE30-0402

Multiple-port firewalls that deliver significant cost savings whilst achieving greater link speeds.



The New Hirschmann™ Multi-port Firewalls Offer Absolute Flexibility for Physical Deployment Combined With State-of-the-art Security Functionality Tailored to the Unique Requirements of Industrial Ethernet Networks.

To help achieve highest network availability Hirschmann™ has introduced two completely new EAGLE firewalls that offer unprecedented flexibility of deployment, as well as state of the art security functionality. Highly adaptable to meet individual requirements, both devices are delivered "modular from the factory", i.e. the customer can order the required combination of LAN and WAN ports.

The first hardware release will support only Ethernet ports. Later hardware releases will also support WAN connections, including ADSL, SHDSL, VDSL, E1/T1 and UMTS.

Applications

The Hirschmann™ EAGLE20-0400 and the Hirschmann™ EAGLE30-0402 deliver firewall protection wherever security is required.

Thanks to their robust, environmentally hardened casings, they are able to operate across an extended temperature range, making them extremely suited for both the traditional and the alternative energy markets including oil, gas, water, wind and substations. They are also ideal for use in water treatment plants – as well as transportation and general automation markets.

Benefits

The primary advantage of EAGLE20-0400 and EAGLE30-0402 over other products is the increased number of ports. This means that in some scenarios a single device can be deployed, rather than multiple EAGLE20s, saving costs and space. Moreover, where there is a need for link speed greater than 100Mb/s, the EAGLE30-0402 provides with its Gigabit ports a better fit, thus delivering the highest level of network security.

A new product to
serve your needs.
Be certain.



Hirschmann™ EAGLE



The Hirschmann™ EAGLE20-0400 and EAGLE30-0402 are multi-port firewalls in convection-cooled metal DIN Rail housings which support six LAN ports – two of which are Gigabit. Available in two versions, the Hirschmann™ EAGLE20-0400 firewall supports 4x100 Mb/s ports, while the Hirschmann™ EAGLE30-0402 firewall supports 4x100 Mb/s ports and 2x1 Gb/s ports; the Gigabit ports are SFP ports. The first hardware release supports Ethernet ports only. Customers can order the required combination of LAN and WAN (with the second hardware release) ports: Ethernet, ADSL, SHDSL, VDSL, E1/T1 and UMTS.

The Advantages at a Glance

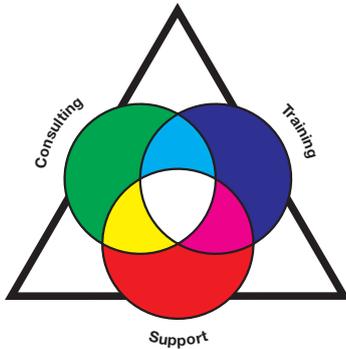
- Transmission rates and standards supported are 100 Mb/s, 1 Gb/s, Ethernet, xDSL, UMTS, PPPoE, E1/T1
- Integrated management functions: CLI via serial port or SSH, web interface, SNMP v3
- Routing functions: static routing
- Redundancy procedures: VRRP
- Security mechanisms implemented: stateful inspection, packet filtering rules, content inspection
- Degree of protection: IP20
- Operating temperatures: -40°C to +85°C
- Cooling system: convection cooling
- Power supply: dual power inputs. Two power supplies are available:
18 V DC to 60 V DC or 48 V DC to 320 V DC and 88 V AC to 265 V AC
- Tools available for configuration and diagnosis: CLI (serial and SSH), web interface, Industrial HiVision
- Standards and approvals:
 - Substation: EN 61850-3, IEEE 1613
 - Safety: EN 60950-1, UL 60950-1, EN 61131-2 (Class 1 Equipment)
 - Hazardous Locations: ISA-12.12.-01 Class 1 Div. 2
 - Traffic Controllers: NEMA TS 2
 - Railway: EN 50121-4
 - Radio Equipment: CE, FCC
 - Hazardous Locations: ISA-12.12.-01 Class 1 Div. 2
- Can be used together with Belden cables; switches; routers; end devices
- Future-proof: additional functionality can be added via firmware upgrade
- Replacement devices can be configured using USB sticks and SD cards
- The Belden Competence Center provides consulting, training, and support for these products

Hirschmann™
EAGLE20-0400 and
EAGLE30-0402 firewalls
provide robust security
and unprecedented
flexibility for highest
network availability.



Technical Information

Product Description		
Type	EAGLE20-0400	EAGLE30-0402
Stateful Inspection Firewall	Firewall rules (incoming/outgoing, management), IP masquerading, 1-to-1 NAT, DoS limiter, MAC filter	
Description	Industrial Firewall, Router, Transparent (Bridging)	
Port Type and Quantity	4 x 10/100BASE-TX, TP-cable, RJ45-socket, autocrossing, autonegotiation, autopolarity	4 x 10/100BASE-TX, TP-cable, RJ45-socket, autocrossing, autonegotiation, autopolarity; 2 x FE/GE SFP slot
Order-No.	see online configurator	see online configurator
Interfaces		
V.24 Interface	1 x RJ11 socket (serial interface for device configuration)	
USB Interface	1 x USB socket (to connect auto-configuration adapter ACA21-USB)	
SD Interface	1 x SD socket (to connect auto-configuration adapter ACA31-SD)	
Power Requirements		
Power Supply/Signaling Contact	1 x plug-in terminal block, 6-pin	
Current Consumption at 24 V DC	max. 14 W	
Operating Voltage	18 to 60 V DC, or 48 to 320 V DC and 88 to 265 V AC	
Software		
Management	Command Line Interface (CLI), Web Interface, Auto-Configuration Adapter (ACA21-USB), DHCP, HiDiscovery, Industrial HiVision	
Diagnostics	LEDs (power, link status, data, status, ACA, RM), signal contact (DC 24 V/1 A), logfile, syslog, configuration check	
Configuration	Command Line Interface (CLI), web interface, auto configuration adapter (ACA21, ACA31), HiDiscovery	
Software	EAGLE20-0400 Firmware v01.0.00 (01.0.00)	
Other Services	NTP, VLAN support (IEEE 802.1Q), port forwarding	
Redundancy Functions	Redundant power inputs	
Protocols	Serial, HTTPS, SSH, SNMP V1/V2/V3, LLDP	
EMC Interference Immunity		
EN 61000-4-2 Electrostatic Discharge (ESD)	6 kV contact discharge, 8 kV air discharge	
EN 61000-4-6 Conducted Immunity	3 V (10 kHz to 150 kHz), 10 V (150 kHz to 80 MHz)	
EN 61000-4-5 Surge Voltage	Power line: 2 kV (line/earth), 1 kV (line/line)	
EN 61000-4-3 Electromagnetic Field	10 V/m (80 MHz to 2000 MHz)	
EN 61000-4-4 Fast Transients (Burst)	2 kV power line, 1 kV data line	
EMC Emitted Immunity		
EN 55022	EN 55022 Class A	
FCC CFR47 Part 15	FCC CFR47 Part 15 Class A	
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	
Construction		
Weight	Aluminium housing: 1.5 kg; Plastic housing: 1.3 kg	
Mounting	DIN Rail 35 mm	
Protection Class	IP 20	
Dimensions (W x H x D)	Width (metal housing): 100 mm; Width (plastic housing): 90 mm; Height: 165 mm; Depth: 115 mm	
Twisted Pair (TP), Length of Cable	0 m to 100 m	
Ambient Conditions		
Operating Temperature	-40°C to +85°C	
Relative Humidity (non-condensing)	10% to 95%	
Storage/Transport Temperature	-40°C to +85°C	
Approvals		
Germanischer Lloyd	Germanischer Lloyd	
Manufacturer Declaration of Conformity	FCC Declaration 47CFR: 11/2009, Part 15, Subpart B, Class A Unintentional radiators, C-Tick Declaration Australian Radio communications Standard 1998	
Safety of Industrial Control Equipment	cUL 508	
Hazardous Locations	cUL Approval according to ISA-12.12.-01 Class 1 Div. 2 Group A, B, C, D	
Substation	EN 61850-3, IEEE 1613	
Traffic Controller	NEMA TS 2	
Scope of Delivery and Accessories		
Scope of Delivery	Device, terminal block, operating instructions, CD-manual	
Accessories to Order Separately	Rail power supply RPS 30, RPS 80 EEC, RPS 120 EEC, terminal cable, network management Industrial HiVision, modem cable, auto-configuration adapter ACA21-USB, 19" installation frame	



The Belden® Competence Center

As the complexity of communication and connectivity solutions has increased, so have the requirements for design, implementation and maintenance of these solutions. For users, acquiring and verifying the latest expert knowledge play a decisive role in this. As a reliable partner for end-to-end solutions, Belden offers expert consulting, design, technical support, as well as technology and product training courses from a single source: Belden Competence Center. In addition, we offer you the right qualification for every area of expertise through the world's first certification program for industrial networks. Up-to-date manufacturer's expertise, an international service network and access to external specialists guarantee you the best possible support for products from Belden®, Hirschmann™ and Lumberg Automation™. Irrespective of the technology you use, you can rely on our full support – from the implementation to the optimization of every aspect of daily operations.

Always Stay Ahead with Belden

In a highly competitive environment, it is crucial to have reliable partners who are able to add value to your business. When it comes to signal transmissions, Belden is the number one solutions provider. We understand your business and want to know your specific challenges and targets to see how effective signal transmission solutions can push you ahead of the competition. By combining the strengths of our three leading brands, Belden®, Hirschmann™; and Lumberg Automation™, we are able to offer the solution you need. Today it may be a single cable, a switch or a connector, thus solving a specific issue; tomorrow it can be a complex range of integrated applications, systems and solutions.

We guarantee the superior performance of your mission-critical systems, even in the most demanding circumstances. If signal transmission is vital to your business, get in touch with the partner that delivers. Be certain. Belden.