PB00044AG

EAGLE20/30 Industrial Firewalls with HiSecOS 3.0 Software

Multiport industrial firewalls, combined with Hirschmann's latest operating system, offer advanced security functionality and data inspection within a single device.

Together, the EAGLE20/30 firewalls with Hirschmann Security Operating System (HiSecOS) 3.0 software offer a solution capable of securing and protecting an entire industrial network via strengthened security features. Customers can select from many options to create a device which exactly matches their requirements.

- **Modular and customizable –** with various configuration options, the multiport firewalls offer up to eight ports, including Fast Ethernet, Gigabit Ethernet, and Symmetrical High-speed Digital Subscriber Line (SHDSL).
- **Networkwide security –** HiSecOS 3.0's new features, including Deep Packet Inspection (DPI), ensure the integrity of every packet passing through a network and protect the network from malicious intents.
- **Easy to configure –** the Firewall Learning Mode (FLM) feature allows for one-click setup to create custom firewall rules for individual network needs.

The EAGLE20/30 firewalls with built-in HiSecOS 3.0 software are designed to eliminate the need for multiple routers. The result can be significant savings in both installation time and costs. The advanced cybersecurity features available in the latest release of HiSecOS ensure protection of complex industrial networks in order to increase network uptime.

Applications

The multiport industrial firewall has features designed for use in automobile and machine building environments, process automation settings, and transportation industries. The flexibility of the EAGLE20/30 devices allows for custom interface options, such as local area network (LAN), SHDSL, and coming in 2016, cellular LTE (4G)/3G interfaces.

The EAGLE20/30 firewall with HiSecOS 3.0 – and its robust design and hardened housings – is also able to operate in any industrial application, including water and wastewater, food and beverage, general manufacturing, and oil and gas.

Your Benefits

The primary advantage of the EAGLE20/30 firewall is the combination of HiSecOS 3.0's advanced security features and the flexibility of the firewall. Eight ports are available per device, including four Fast Ethernet, two Gigabit Ethernet and two SHDSL ports. Security features, including Deep Packet Inspection (DPI) and Firewall Learning Mode (FLM), ensure the highest level of security for your industrial network.
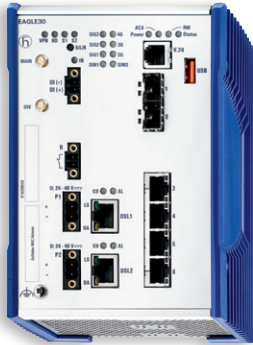
A new product to serve your needs.
Be certain.

EAGLE20/30 Firewalls with HiSecOS 3.0

The Hirschmann EAGLE20-0400 and EAGLE30-0402 are multi-port firewalls in convection-cooled, metal DIN rail housings, which support eight total ports.

The multiport EAGLE firewalls are designed to fulfill the requirements of the IEEE 1686 standard, including functions, such as security audit trails and user management with password policies. To exceed these requirements and be prepared for future standards, several secure configuration interfaces are part of the router's functionality, as is a unique configuration encryption.
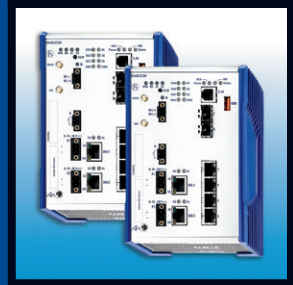
The new HiSecOS 3.0 gives customers a greater level of insight into network traffic. With the Firewall Learning Mode, the intentions of packets passing through the EAGLE20/30 industrial firewalls are evaluated, and based on the configured rules, safe packets are allowed to continue through while unwanted packets are discarded. Customized network rules can be created in no time using the advanced Graphical User Interface available with the device.

Benefits at a Glance

- Availability of multiple ports offers cost savings and flexibility
- DPI to ensure network packet integrity
- Easy firewall deployment and one-click rule setup
- Additional router redundancy protocols, including Virtual Router Redundancy Protocol (VRRP) to reduce downtime
- Support for SHDSL interfaces – allows WAN connectivity using legacy telephone cables
- Enhanced security, including Ingress Protection and ACL-based counters and filters
- Simple intrusion detection
- Small form-factor pluggable (SFP) support for twisted-pair Gigabit cables
- Meets various standards and approvals
  – Substation: EN 61850-3, IEEE 1613
  – Safety: EN 60950-1, UL 60950-1, EN 61131-2 (Class 1 Equipment)
  – Traffic Controllers: NEMA TS 2
  – Railway: EN 50121-4
  – Radio Equipment: CE, FCC
  – Hazardous Locations: ISA-12.12.-01 Class 1 Div.
- Cellular LTE functionality (coming in 2016)

The firewalls, combined with the latest Operating System HiSecOS 3.0, brings advanced industrial security functionality into a single networking solution.

Technical Information

Product Description		
Type	**EAGLE20-0400**	**EAGLE30-0402**
Stateful Inspection Firewall	Firewall rules (incoming/outgoing, management), IP masquerading, 1:1 NAT, Double-NAT, Masquerading NAT, Destination NAT, Hairpin NAT, DoS Protection, Access Control Lists (ACLs)	
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, optional 2 x SHDSL
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 ACA22-USB)	
SD Interface	1 x SD socket (to connect auto-configuration adapter ACA31)	
Power Requirements		
Power Supply/Signaling Contact	For CC Power Supply: 2 x plug-in terminal block 2-pin, for K9 Power Supply: 1 x plug-in terminal block 3-pin	
Power Consumption	max. 19 W	
Operating Voltage	2 x 24/36/48 V DC (18 to 60 V DC), or 1 x 60/110/125/220/250 V DC (48 V to 320 V DC) and 110/120/220/230 V AC (88 to 265 V AC) or 2 x 48-320 V DC and 88-265 V AC	
Software		
Software Version	HiSecOS 03.0	
Security	Firewall rules (incoming/outgoing, management), DoS prevention, IPSec VPN, Layer 3 and Layer 2 Access Control Lists (ACL), ACL flow based limiting, Audit trail, Management VLAN, Role based Access Control, IEEE 1686 compliant configuration possible, Ingress storm protection, Deep Packet Inspection (DPI) - OPC and Modbus, Firewall Leaning Mode (FLM), Authentication using LDAP	
Routing	VLAN and port based routing, static routing, multinetting, IP masquerading, 1-to-1 NAT, port forwarding, Static and Dynamic ARP entries, OSPFv2, Tracking Framework for Static Routing	
Multipoint VPN	IPSec, IKE v1/v2, 3DES, AES (-128, -192, -256), Pre-Shared Key (PSK), X.509v3 certificates, MD5, SHA-1, NAT-T, Hub-and-Spoke	
Management	SNMPv3, SSH2/SFTP, HTTPS, V.24 CLI, SNMPv1/2, local and central User Management (RADIUS), HiDiscovery v2, Industrial HiVision, HiView	
Diagnostics	LEDs (Power, Link Status, Data, Status, ACA, RM), Signal Contact (24 V DC/1 A), Log File, Syslog, Configuration check RMON (Statistic), SFP diagnostics (temperature, optical transmit and receive power), trap for changes and configuration saves, Counter for ACL Rules	
Configuration	Command Line Interface (CLI), web interface, Auto Configuration Adapter (ACA22, ACA31), HiDiscovery v2, local & central user management (RADIUS), Industrial HiVision, HiView	
Other Services	NTP, VLAN support (IEEE 802.1Q), rate limiter, QOS 8 classes, port prioritisation IEEE 802.1D/p, VLAN IEEE 802.1Q	
Redundancy Functions	VRRP (Virtual Router Redundancy Protocol), Tracking Framework for VRRP	
Protocols	Serial, HTTPS, SSH, SNMP V1/V2/V3, LLDP	
Mechanical Stability		
IEC 60068-2-27 Shock	15 g, 11 ms duration, 18 shocks	
IEC 60068-2-6 Vibration	1 mm, 2 Hz to 13.2 Hz; 0.7 g, 13.2 Hz to 100 Hz	
Construction		
Weight	1.2 to 1.9 kg	
Mounting	DIN Rail 35 mm	
Protection Class	IP20	
Dimensions (W x H x D)	Temperature Standard (S): 90 x 164 x 120 mm (for WAN: 99); 108 x 164 x 120 mm (for WAN: H2) Temperature Extended (T, E): 98 x 164 x 120 mm (for WAN: 99); 116 x 164 x 120 mm (for WAN: H2)	
Ambient Conditions		
Operating Temperature	-40 °C to +70 °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	CE, C-Tick, FCC	
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, Auto-configuration adapter (ACA22-USB EEC or ACA31), 19" installation frame	
Reliability		
MTBF Range	46.3 to 67.1 years	
Warranty	5 years standard	

NOTE: These are the prominent technical specifications. For complete technical specifications visit: www.hirschmann.com

Multi-port Industrial Firewall Configurations
EAGLE20-0400 and EAGLE30-0402

`EAGLE30-04 02 206 TT 9 99 T CC Z9 HS E 3F XX.X.XX`

Design/Model
EAGLE20 = Security Router
EAGLE30 = Security Router

Fast Ethernet Ports
04 = 4 x 10/100 Mbit/s

Gigabit Ethernet Ports
00 = 0 x 1000 Mbit/s
02 = 2 x 1000 Mbit/s

Type Uplink Ports
206 = All SFP slots
999 = Not available

Remaining Ports
TT = All Twisted Pair

Cellular Ports
9 = Not available

WAN Ports
99 = Not present
H2 = 2 x SHDSL

Temperature Range
S = 0 °C to + 60 °C
T = –40 °C to +70 °C
E = –40 °C to +70 °C inclusive Conformal Coating

Voltage Range
CC = 2 x 24/36/48 V DC
K9 = 1 x 60/110/125/220/250 V DC and 110/120/220/230 V AC
KK = 2 x 48–320 V DC and 88–265 V AC

Approvals

Z9 = CE, FCC, EN 61131, (EN 60950)	T9 = Z9 + EN50121-4
Y9 = Z9 + cUL508	TY = T9 + cUL508
X9 = Z9 + cUL508 + ISA 12.12	V9 = Z9 + IEC61850-3, IEEE1613
U9 = Z9 + GL (ABS, BV, DNV, LR)	VY = V9 + cUL508
UY = U9 + cUL508	VU = V9 + GL (ABS, BV, DNV, LR)
UX = U9 + cUL508 + ISA 12.12	VT = V9 + cUL508 + EN50121-4
UT = U9 + cUL508 + EN50121-4	

OEM Type
HS = Hirschmann Standard

Configuration
E = Standard Configuration

Software Level

3F = Layer 3 Firewall Software	OP = 3F + OPC Classic Enforcer
MB = 3F + Modbus Enforcer	01 = 3F + OPC Classic Enforcer + Modbus Enforcer

Software Version
XX.X.XX = Current Software Release
02.0.00 = Software Release 2.0
03.0.00 = Software Release 3.0

NOTE: The part number categories (**OEM Type, Configuration** and **Software Version**) are optional.

Phone: **1-855-400-9071**　　　　　　　　　　　　　　　**www.hirschmann.com**

　　　EAGLE20/30 Industrial Firewalls with HiSecOS 3.0_PB00044_INIT_HIR_1115_A_AG