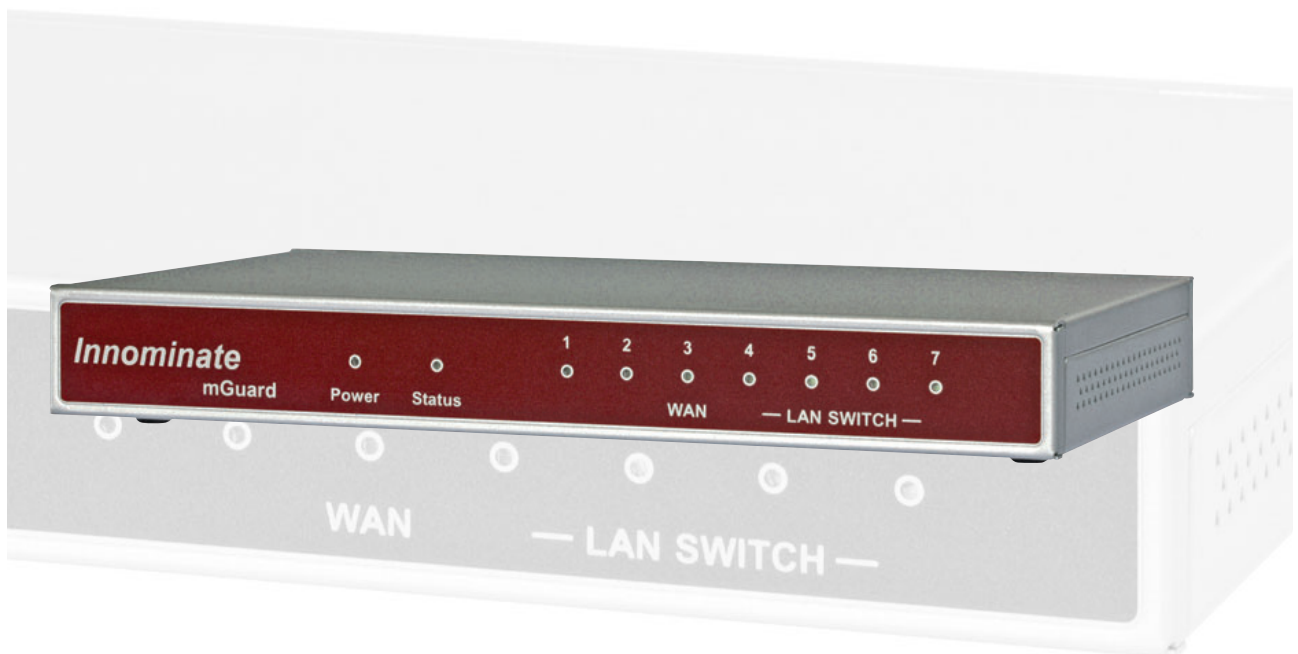


Innominate

mGuard delta

Integrated firewall and VPN appliance



The mGuard delta is available in the performance versions

- mGuard delta
- mGuard delta VPN

The mGuard delta is a compact LAN switch which offers maximum protection through integrated VPN and firewall functions, as well as optional anti-virus protection. The mGuard firewall can be distributed on up to four LAN segments. The mGuard delta can be integrated flexibly into the back-office or as an interface to the production network. Its robust metal housing is suitable for desktop use or for use in distribution rooms.



Primary functions

The mGuard delta security solution from Innominate unites all the functions necessary to reliably safeguard IP connections:

- Configurable firewall protects the system from unauthorized access from „outside“. The Stateful Inspection Firewall filters data packets based on the originating and target address, blocking undesired data traffic – also from „inside“.
- VPN (optional) for secure data transmission via public networks (hardware-based DES, 3DES and AES encryption, IPsec protocol).
- Integrated anti-virus protection (optional) with support for the HTTP, FTP, SMTP and POP3 protocols. Anti-virus protection takes place outside of the system, offering a higher level of system availability and full performance for production and the back-office.
- The mGuard delta is equipped with a 4 port 10/100 TX Ethernet switch which distributes the security functionality to a maximum of four network segments.

mGuard delta – segmented security

The mGuard delta is a compact security appliance which can be used in enterprise networks for both production environments as well as in the back-office. Particularly in the case of logically segmented networks, a distributed security function is often required. The intelligent, high-performance security functions of the mGuard delta can be combined with the advantages of a standard Ethernet/Fast Ethernet switch.

In the process, the mGuard delta offers all the benefits of „device attached security“ – a concept with clear advantages over classic office firewalls or software-based solutions for the protection of dedicated systems or different network segments.

Redundant firewall (optional)

Two mGuard delta devices can be operated redundantly in the High Availability Mode. Here, the active mGuard delta transmits the firewall statuses to the standby unit. In the event of outfall of the principle mGuard delta, uninterrupted protection as well as high availability of the overall system is thus assured (mGuard Redundant Firewall Option).

User firewall

The user firewall only allows users with dynamic IP addresses (e.g. service technicians) access to internal or external resources after they have logged onto the mGuard appliance. Passwords can be stored locally on the appliance or centrally on the company's RADIUS server.

The utmost in security

Conventional gateway appliances normally protect entire networks or network segments with a uniform security standard. In such cases, varied levels of security, individually restricted access rights or exactly stipulated access times are virtually impossible to realize. Moreover, conventional gateway appliances also entail access lists or firewall rules that are maintained in the backbone, quickly becoming complex and unintelligible – raising the risk of security gaps.

With the mGuard delta, you can assign each production system or network segment its own security components: with individual security levels, specifically configured access rights and numerous other unique advantages.

Maximum data throughput for VPN and firewall

The basis of the integrated security solution is the embedded Linux configured by Innominate, running on a special network processor with XScale core by Intel (IXP 42x), with 533 MHz processor capacity, 128 Mbytes of SDRAM working memory and 16 Mbytes of Flash memory. The Intel processor features hardwired rules for the DES, 3DES and AES encryption procedures. This guarantees maximum data throughput for firewall (up to 99 Mbit/s) and VPN connections (up to 70 Mbit/s).

Innominate Device Manager

With the Innominate Device Manager (IDM) large populations encompassing several thousand mGuard appliances can be efficiently configured and managed. Due to the Innominate mGuard's template-based approach, the roll-out of numerous identically-configured appliances can be carried out quickly and conveniently.

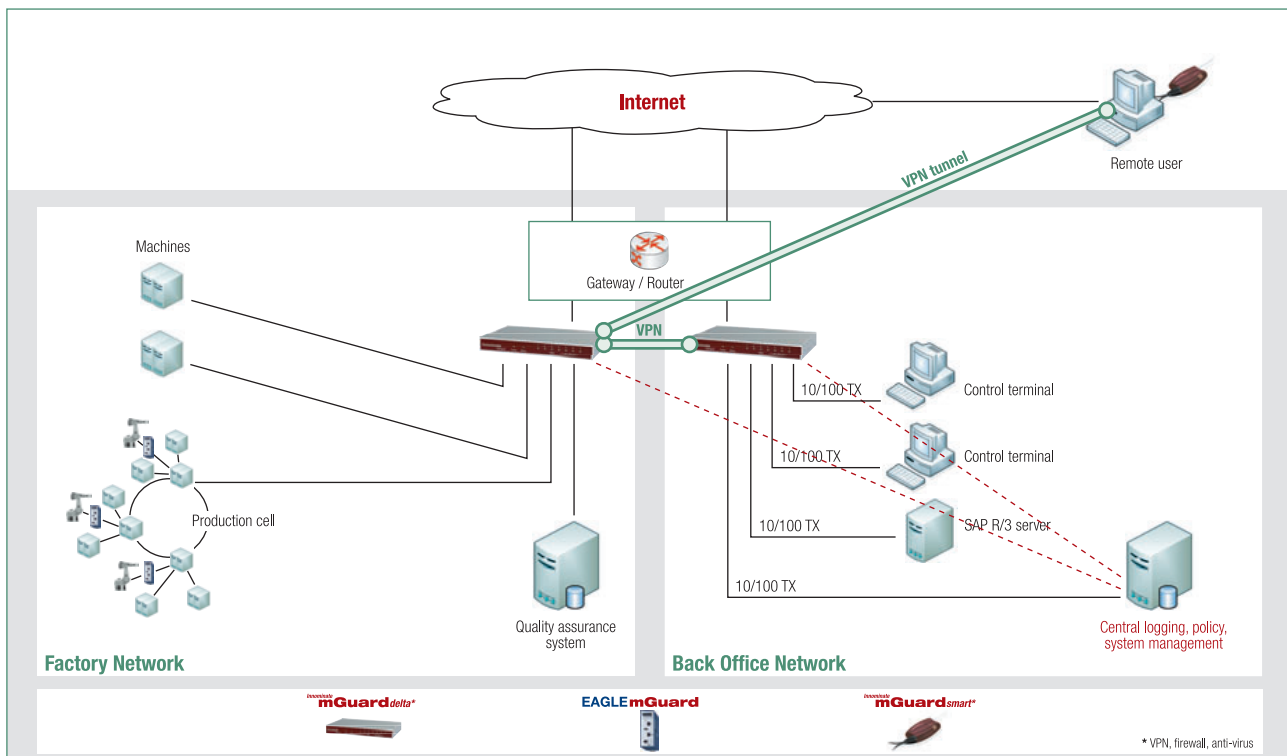
For intuitive monitoring and logging, the mGuards communicate with all standard SNMP systems. The full graphic integration can be realised on the Industrial HiVision management platform from the firm Hirschmann, for example.

At a glance:

- Based on the Intel IXP 42X series security processor.
- Stateful Inspection Firewall.
- User firewall regulates access to internal or external resources via user login to the mGuard and central RADIUS server.
- VPN tunneling with 3DES/AES encryption.
- Virtual addressing (1:1 NAT) in the VPN tunnel avoids address conflicts.
- Optional anti-virus protection.
- Redundant operation (active/passive) with the VRRP (Virtual Router Redundancy Protocol).
- 10/100Mbps Ethernet WAN port.
- 4 port 10/100TX Fast Ethernet switch.
- Configuration with the Innominate Device Manager (IDM).
- Manageable via SNMP, HTTPS, SSH.
- RS-232 port for management.

Unassailable with the Innominate Stealth Mode

mGuard systems by Innominate take advantage of a special function – the Stealth Mode. This allows the systems to perform absolutely transparently – for they do not even require their own IP addresses. Instead, the mGuard uses the same IP as the computer it is protecting and therefore cannot be recognized by invaders, making the system unassailable to attack. Moreover, the Innominate Stealth Mode does not require any modifications to the network.



* VPN, firewall, anti-virus

Hardware performance features	mGuard delta	mGuard delta VPN
CPU	Intel IXP 42x with 533 MHz	Intel IXP 42x with 533 MHz
RAM / Flash	128 MB SDRAM/16 MB Flash	128 MB SDRAM/16 MB Flash
4 LAN / 1 WAN port	Ethernet IEEE 802.3 10/100 BaseTX, RJ45, full duplex, Auto-MDIX	Ethernet IEEE 802.3 10/100 BaseTX, RJ45, full duplex, Auto-MDIX
MAU management	•	•
Internet		
Internet support	PPPoE, PPTP, Static IP, DHCP client, Stealth/Multi Stealth	PPPoE, PPTP, Static IP, DHCP client, Stealth/Multi Stealth
Network services		
DHCP support	Server or relay agent	Server or relay agent
DNS cache	•	•
Dyn. DNS	•	•
NTP client	•	•
LLDP (Link Layer Discovery Protocol)	•	•
VLAN (802.1Q)	•	•
Internet updates	•	•
Remote syslog logging	•	•
User-based configuration profiles	•	•
Multi language	English, German and Japanese	English, German and Japanese
Virtual private network		
VPN data throughput (3DES)	-	70 Mbit/s
Max. number of VPN tunnels	-	10
Encryption procedure	-	DES, 3DES, AES-128, -192, -256
Hardware-based encryption	-	•
IPsec mode	-	ESP tunnel/ESP transport
Authentication	-	X.509v3 certificates with RSA or PreShared Keys (PSK)
Data integrity	-	MD5, SHA-1
Internet Key Exchange (IKE)	-	Quick mode, main mode, PFS
IPsec L2TP Server	-	•
VPN in Stealth Mode	-	•
1:1 NAT in the VPN	-	•
IPsec NAT Traversal	-	•
Dead Peer Detection (RFC 3706)	-	•
Dyn. DNS VPN support	-	•
System management		
Web-based management (HTTPS)	•	•
Command line interface (SSH)	•	•
SNMP v1, v2, v3	•	•
Innominate Security Configuration Manager	optional	optional
Innominate Device Manager	optional	optional
Anti-virus protection		
Integrated scan engine	optional	optional
Scans HTTP, FTP, POP3, SMTP, HTTP proxy	optional	optional
Block by file size	optional	optional
Automated pattern file updates	optional	optional
Technical overview	Firewall	mGuard Software Options
Serial interface	RS232, internal	Firewall data throughput
Network interfaces	4-Ports Ethernet 10/100 TX, 1 Port WAN 10/100 TX	99 Mbit/s
Power supply	5V, 3A	User licenses
LED displays	Power x1, Status x1, link/active LAN Ports	unlimited
Operating temperature	0 to 40 °C	Stateful Inspection Firewall
Storage temperature	-20 to +70 °C	NAT, 1:1 NAT
Relative humidity	5 to 95%, non-condensing	Port forwarding
Dimensions (W x H x D)	239 x 156 x 30 mm	MAC-Filtering
Weight	1.200 g	Firewall rules in VPN connections
Certification	CE, FCC	IP spoofing protection
		Syn flood protection
		Configurable DoS protection
		Redundant Firewall (VRRP)
		optional
		Innominate mGuard VPN-10
		IPSec VPN Gateway, max. 10 VPN tunnels
		Innominate mGuard VPN-250
		IPSec VPN Gateway, max. 250 VPN tunnels
		Innominate mGuard Anti-Virus-50
		50 appliances, perpetual license for CLAM AV™ virus patterns
		Innominate mGuard Anti-Virus-200
		200 appliances, perpetual license for CLAM AV™ virus patterns
		Innominate mGuard Anti-Virus-1000
		1000 appliances, perpetual license for CLAM AV™ virus patterns
		Innominate mGuard Redundant Firewall Option
		Requires two mGuard Security Appliances

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