

datasheet

mGuard rs4000

Robust. Reliable. Factory Line. Industrial Security redefined

Hard shell, secure core

The new generation of fanless industrial security routers *mGuard rs4000* from Innominate's factory line convinces through reliable security and performance in a compact, industrial metal casing for DIN rail mounting.



Reliability redefined

Engineered and manufactured in Germany, *mGuard rs4000* security appliances combine the powerful new mGuard hardware platform with the reliable mGuard firmware. Based on a hardened embedded Linux from Innominate, this combination integrates four complementary security components: a bidirectional stateful firewall, a flexible NAT router, a highly secure VPN gateway and, optionally, an industry-compatible protection from malware. Due to its front-side configuration memory (SD card), the *mGuard rs4000* can be quickly and easily put into operation, updated, and exchanged.

High availability in a proven format

As successor to the industry standard *mGuard industrial rs*, the *mGuard rs4000* is compatible to this model not only in its space requirements on DIN rails, but also in its functionality. The new mGuard factory line offers high-end industrial security in the form of an extremely powerful and fail-safe product portfolio, which is also ideal for sophisticated high-availability scenarios and complex security architectures.

Security for production

The *mGuard rs4000* is perfectly suited for the decentralized protection of production cells or individual machines against manipulations. A centralized, enterprise-wide office firewall is typically not able to protect network production systems effectively against attacks from both inside and outside. Thus, production installations can only be reliably protected from sabotage and resulting production downtimes through decentralized end-point security.

Industry-standard remote maintenance

For software-independent remote maintenance scenarios, the *mGuard rs4000* can be used as a VPN gateway for IPsec-encrypted VPN tunnels. Equipped with the respective VPN licenses, it functions as a remote access infrastructure for the secure connection of machinery and equipment. As a security add-on, VPN tunnels can be switched on and off by the machine or its operator via software or hardware interfaces.

This makes *mGuard rs4000* a perfectly compatible companion to central VPN gateway products such as the *mGuard centerport*, *mGuard bladepack*, or *mGuard delta²* and to Innominate's cloud-based infrastructure solution, the *mGuard Remote Services Portal* (available in selected countries).

Hardware properties	mGuard rs4000
Platform	Freescalar network processor with 330 MHz clock rate
Network interfaces	1 LAN port 1 WAN port Ethernet IEEE 802.3 10/100 Base TX RJ 45 Full-Duplex Auto-MDIX
Other interfaces	serial RS232, D-sub DE-9 male 2 digital in- & outputs each
Memory	128 MB RAM 128 MB Flash SD Card, exchangeable configuration memory
High availability	optional: VPN router & firewall
Power supply	9 - 36 V DC voltage range, redundant
Power consumption	typical 2.13 Watt
Temperature range	-20 - +60 °C (operation) -20 - +70 °C (storage)
Air humidity range	5 - 95 % (operation and storage), non-condensing
Protection class	IP 20
Dimensions (H x W x D)	130 x 45 x 114 mm (up to DIN rail surface)
Weight	725 g
Firmware and performance values	mGuard rs4000
Firmware compatibility	mGuard v7.4 or higher; Innominate recommends to always use current firmware versions and patch releases; for scope of functions see relevant firmware datasheet
Data throughput (router firewall)	99 Mbit/s bi-directional
Virtual Private Network (VPN)	IPsec (IETF standard) up to 250 VPN tunnels
Hardware-based encryption	DES 3DES AES-128/192/256
Encrypted VPN throughput (AES-256)	35 Mbit/s bi-directional
Management support	Web GUI (HTTPS) Command Line Interface (SSH) SNMP v1/2/3 central device management software
Diagnostic	LEDs (Power 1 & 2, State, Error, Signal, Fault, Modem, Info) signal contacts service contacts log file remote syslog
Other	mGuard rs4000
Conformity	CE FCC UL 508 (in preparation) ANSI/ISA 12.12 Class I Div. 2 (in preparation)
Specifics	Real time clock Trusted Platform Module (TPM) temperature sensor mGuard Remote Services Portal ready

Please note the safety instructions in the product documentation supplied (package slip).

Available models and order numbers:	
mGuard rs4000 TX/TX	HW-107010
mGuard rs4000 TX/TX VPN	BD-701000

About Innominate Security Technologies AG

Innominate, a Phoenix Contact Company, is a leading supplier of components and solutions for controlled and secured communication in industrial networks. The German company specializes in the protection of networked industrial systems and the secure remote diagnosis and maintenance of machinery and equipment over the Internet. Its mGuard product line of network security appliances provides router, firewall, virtual private network (VPN), as well as quality of service (QoS) functionalities and helps with intrusion detection and antivirus protection. The mGuard portfolio is complemented by a highly scalable device management software. Innominate products are marketed worldwide under the mGuard brand through system integrators and OEM partners.

Further information can be found at: www.innominate.com.

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The Benefits

Security: Don't give attackers a chance! The highly-effective security components of the *mGuard* security appliance provide your systems, machines and communication channels with the highest level of protection against attacks, so that you can sleep at night.

Plug-n-Protect: Avoid long-winded coordination! The self-sufficient *mGuard* security appliance, with its patented *mGuard stealth mode*, can be integrated quickly and without repercussions. In the process, the behavior of the *mGuard* is completely transparent, and it uses the IP address of the system it is protecting. Thus the *mGuard* cannot be detected by an attacker, and therefore cannot be compromised.

Speed: Increase your security without impairing the response times! The extremely high throughput rates of the *mGuard* enable you to have fast and at the same time safe IP communication with all machines and systems.

Load reduction: Protect your computers! The *mGuard cifs integrity monitoring* is an industry-compatible alternative to traditional anti-virus solutions that reliably detects malware. Without the risk of downtime due to false alarms, and with a considerable load reduction for the systems being protected.

Up-to-dateness: Don't get left behind! You can meet new security and market requirements quickly and easily with the aid of regular upgrades to the *mGuard firmware*.

Time saving: Increase your efficiency level! The optionally available *device manager* makes it easy for you to centrally manage and perform a template-based roll-out of all your *mGuard* devices.