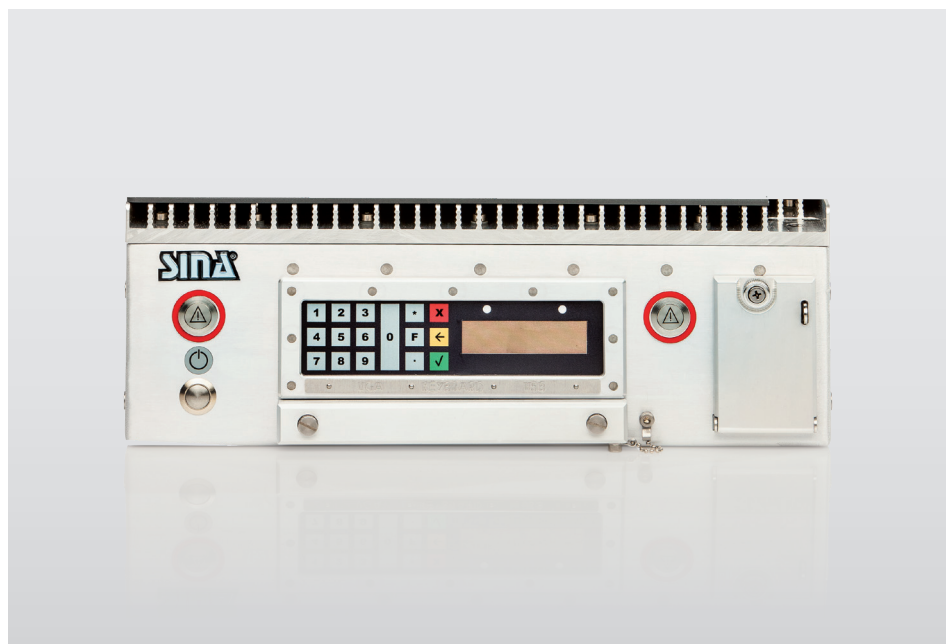


SINA[®] L3 Box H R 200M

Ruggedized VPN-Gateway with High National and International Approvals



Benefits:

- » Approved for German national STRENG GEHEIM*, NATO SECRET and SECRET UE/EU SECRET
- » PEPP-compatible
- » High performance
- » Robust hardware platform
- » Interchangeable network interfaces
- » Comfortable Management

As a VPN gateway, the SINA L3 Box H R 200M is a key component of the central IT infrastructure in high-security networks. The data exchange between the SINA components is securely transmitted via encrypted VPN tunnels. SINA L3 Boxes connect public authority or corporate networks via the Internet. In addition, access to (terminal) servers by SINA clients is provided via pre-switched SINA L3 Boxes, which serve as cryptographic network access points.

The SINA L3 Box H R 200M and the PEPP-based predecessor model SINA Box IP54 are the only ruggedized, IP-based encryption systems approved by the German Federal Office for Information Security (BSI) for transmitting classified information up to and including German national GEHEIM and STRENG GEHEIM. Furthermore, the systems are also approved for SECRET UE/ EU SECRET and NATO SECRET. As with the predecessor model, the SINA L3 Box H R 200M was especially developed for national and international military and governmental high security networks.

In direct comparison with the SINA Box IP54, the SINA L3 Box H R 200M is substantially more powerful, lighter and more robust, especially in terms of SINA CORE. The SINA L3 Box H R 200M can be deployed with even more flexibility in many respects, as can be seen for example in the new reloadable crypto device classes, enhanced temperature ranges, the network

interfaces that can be reconfigured directly on the device and the more modest power consumption. Through the use of long-life batteries, there is no need to replace the batteries. Furthermore, online updates for operative parameters (data container D2) are supported for SINA CORE modules.

IT security concept

The SINA L3 Box H R 200M is based on a holistic IT security concept. It comprises in particular:

- A ruggedized, intensively tested SINA OS system platform
- Smartcard technology
- IPsec-based cryptography
- SINA CORE crypto module as well as
- Hardware, firmware and software that are dimensioned and configured in accordance with approval standards.

Secure system start and operation

The SINA L3 Box software is coreboot-protected and reliably loaded by the flash memory during system start. All initial configuration data and security associations for the SINA L3 Box are stored in a protected area of the SINA Smartcard. When a SINA L3 Box is started, the security associations to the SINA Management and the primary communications-related SINA L3 Boxes are set up as IPsec VPN tunnels. If necessary, additional security associations or configuration data from the SINA Management are loaded. This greatly simplifies configuration, installation and hardware replacement with the SINA L3 Box.

Systems monitoring

The SINA L3 Boxes log all data related to monitoring during operation. This can be imported into network management systems where it can be processed and/or displayed as required.

Use under extreme environmental conditions

The SINA L3 Box H R 200M is based on a ruggedized hardware platform that can be used under extreme environmental conditions. All outward-facing interfaces and layers are protected separately. The housing offers increased protection against impacts, vibration, dust and dampness. Furthermore, unlike the predecessor model SINA Box IP54, the SINA L3 Box H R 200M can be operated in an extended temperature range. In many respects the hardware platform meets the demanding requirements of the MIL-STD-810G standard.

High availability

It is possible to increase the availability and reliability of SINA L3 Boxes by means of redundant configurations. An automatic switchover for example triggers a second SINA L3 Box to take on the functions of the failed SINA L3 Box (hot standby) that was previously active.

SINA L3 Boxes also support geo-redundant and load-balancing configurations. In geo-redundant scenarios, alternative communication channels – which can be prioritised as necessary – run via SINA L3 Boxes in different locations. For load-balancing configurations, the SINA L3 Boxes interact with commercially available load balancers.



Satellite communication

Use of SINA L3 Boxes requires IP-enabled transport networks, including satellite communication lines. The available bandwidth of the satellite lines is used effectively in tandem with satellite optimisers.

Management

The SINA L3 Box is configured and controlled centrally by SINA Management. An integrated public key infrastructure (PKI) with associated user management supports essential administrative processes involving SINA Smartcards. This includes, in particular, their personalization, the generation or updating of keys and cryptographic parameters as well as the administration of the associated PINs and PUKs.

Approval-related construction classes

		SINA L3 Box H R 200M 27A 
Approval	German national GEHEIM, STRENG GEHEIM*, NATO SECRET, SECRET UE/EU SECRET	
Boot integrity protection	coreboot	
Software versions	2.2	
Manipulation protection	SINA CORE	
Emission protection	SDIP 27 Level A	
Authentication token	SINA Smartcard	

Technical Data

General data	
Dimensions (W x H x D)	345 mm x 125 mm x 493 mm
Weight	10 kg (without assembly plate)
Power consumption	85 W
Voltage supply	DC 24 V (20 - 28 V) / 3.5 A
Cryptography	
Module	SINA CORE 100
Encryption performance	180 Mbit/s bidirectional
Symmetrical encryption process	Libelle
Asymmetrical encryption process	EC-GDSA, EC-DH
LAN connections	
Network interfaces	1 x 100/1000 Mbit LWL optical fibre (interchangeable) 1 x 100/1000 Mbit LWL in SINA CORE (interchangeable)
Plug type	ST
Temperature ranges	
Operation	+0 °C to +45 °C
Transport and storage	-25 °C to +60 °C
Miscellaneous	
Protection type	IP54
Hardening	MIL-STD-810G

* In usage situations where data classified as German national STRENG GEHEIM is being processed, the usage scenario and IT security concept for the SINA L3 Box H R 200M must be specifically agreed with the German Federal Office for Information Security (BSI).

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