

Crypto Client

Universally Usable for Mobile
and Extreme Usage Conditions



The RW11-based SINA Workstation H is a client with crypto file system and IPsec-secured communication.

The multi-session-capable crypto client communicates VPN tunnel secured with server or terminal server areas and can be used flexible both online and offline. According to the requirements of the deployment scenario, different classified sessions can be combined and used in parallel, taking into account the session type.

The SINA Workstation H R RW11 is a crypto client that was developed in cooperation with the German Federal Office for Information Security (BSI) for processing, storage and transmission of classified information up to and including German national GEHEIM. In addition, the SINA Workstation H R RW11 is approved for NATO SECRET and SECRET UE/EU SECRET. The focus is on national and international military and governmental high-security networks with tactical mobile system components.

The operational experience with the SINA Workstation H R RK9 in the Afghan(istan) Mission Network and evaluation results in military command information system of the German Federal Armed Forces led to a forced further development of the

SINA Clients. The aim was to offer a client for mobile and extreme use with the SINA Workstation H R RW11, which was specially developed for the characteristically high requirements of such scenarios.

Product Improvements

Compared to its predecessor model SINA Workstation H R RK9, the new ruggedized notebook platform of the SINA Workstation H R RW11 offers a number of product improvements. Equipped with an Intel® Core™ i7-3610QE CPU, it enables noticeably higher application performance, especially when sessions are running in parallel.

The SINA Workstation H R RW11 is also available in two versions with regard to emission protection. You can choose between a Zone 1 or SDIP 27 Level A system.

IT security concept

The SINA Workstation H R RW11 is based on a holistic IT security concept. This includes in particular:

- A ruggedized, security-evaluated SINA OS system platform
- Smartcard-based authentication
- Hardware-based cryptography by SINA CORE
- Session-specific crypto file system partitions as well as
- Hardware, firmware and software that are dimensioned and configured in accordance with approval standards.

Secure system start and operation

The software of all SINA Workstations E/H is started coreboot-protected. All initial configuration data and security associations of the SINA Workstation are stored in a protected area of the SINA Smart-card. When a SINA Workstation is started, the security associations to SINA Management and the communication-relevant SINA L3 Boxes are set up as IPsec VPN tunnels. If required, additional security associations or configuration data are reloaded by SINA Management. This makes the SINA Workstation easy to configure, install and exchange hardware.

For extreme usage conditions

The SINA Workstation H R RW11 is based on a ruggedized notebook designed in particular for extreme conditions. All interfaces and slots are separately protected. The housing offers a high level of protection especially against shock, vibration, dust and moisture. In addition, this SINA client can be operated in extreme temperatures. Moisture protection is ensured even with non-sealed covers or with connected peripherals. The hardware platform meets the demanding requirements of the MIL-STD 810G and the MIL-STD 461F.

Benefits

- Approved for German national GEHEIM, NATO SECRET and SECRET UE/EU SECRET
- Zone 1 or SDIP 27 Level A
- SINA CORE Multi Level Data Separation
- Compact design
- Mobile use
- Ruggedized hardware



Satellite communication

Professional applications via commercial Satcom IP services such as BGAN place high technical requirements on the crypto devices used. In tests by the German Federal Armed Forces, it has been proven that the SINA Workstation H supports applications such as video conferencing even with double-hop satellite connections.

Management

The SINA Workstation 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 or SINA Smartcard Tokens. 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 Workstation H R RW11

Performance data	
Approval	German national GEHEIM, NATO SECRET, SECRET UE/EU SECRET
Boot integrity protection	coreboot
Software version	2.8
SINA CORE device classes	National 1.x (PEPP-compatible) NATO 1.x (PEPP-compatible) EU 1.x (PEPP-compatible)
Manipulation protection	SINA CORE
Emission protection	Zone 1 SDIP 27 Level A
Authentication token	SINA Security Token

Technical data

General data	
Size (W x H x D)	392 x 302 x 54 mm
Weight	5.4 kg
Service compartment	Battery and battery pack
Performance data	
CPU	Intel® Core™ i7-3610QE, Quad Core Processor, 2.3 GHz max 3.30 GHz, with Intel® Turbo Boost Technology, 6 MB Intel® Smart Cache
Working memory	32 GB
Boot medium	500 GB hard disk
Power supply	100–240 V AC
Power consumption	75 W (operation)
Monitor	
Display	LCD 15.6" Full HD (1920 × 1080)
Interfaces	
USB 3.0	2× (only Zone 1)
USB 2.0	2×
Audio	HD sound, stereo speaker, access for headset
Hardware cryptomodul	SINA CORE M100R
Smartcard reader	Integrated, class 1
Network	1× SINA CORE M100R (Fast Ethernet 100BASE-FX (Wavelength 1310 nm, Multi Mode))
Keyboard	Integrated, German
Mouse	Integrated touchpad
Monitor	Mini Display Port, VGA (only Zone 1)
Temperature ranges	
Operation	-20 °C to +55 °C
Transport and storage	-40 °C to +70 °C
Environmental properties	
Dust, dirt and dampness protection	IP 65
Hardening	MIL-STD 810G, MIL-STD 461F

Sources

Public authority customers can acquire the SINA Workstation H R RW11 via the framework contract 5070 "SINA Family Cryptographic Devices" with the Procurement Office of the German Federal Ministry of the Interior, or through SINA supplemental contract Q/IB1C/R6359 with the German Federal Armed Forces. secunet would also be pleased to serve all other national and international customers.

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