

SINA[®] Workstation E R RV11

Compact lightweight Crypto Client for Mobile and Extreme Usage Conditions



Benefits:

- » Approved for German national VS-VERTRAULICH, NATO CONFIDENTIAL and CONFIDENTIEL UE/ EU CONFIDENTIAL
- » System design for German national GEHEIM and Mission SECRET (project-specific approvals)
- » Multi Level Data Separation
- » Compact design
- » LCD 15.6" Full HD
- » Mobile use
- » Ruggedized hardware platform

The RV11-based SINA Workstation E 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 E R RV11 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 E R RV11 is approved for NATO CONFIDENTIAL and CONFIDENTIEL UE/ EU CONFIDENTIAL. 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 systems 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 E R RV11, 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 E R RV11 offers a number of product improvements. Equipped with an Intel® Core™ i7-3517UE CPU, it enables noticeably higher application performance, especially when sessions are running in parallel.

In addition, the hardware platform RV11 has an aluminum case and a significantly lower unit height. Furthermore, the upper operating temperature range has been increased to +60 °C.

IT security concept

The SINA Workstation E R RV11 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 Smartcard. 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 E R RV11 is based on a ruggedized notebook design 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.

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, has been proven that the SINA Workstation 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 E R RV11	
Approval	German national VS-VERTRAULICH, NATO CONFIDENTIAL and CONFIDENTIEL UE/EU CONFIDENTIAL German national GEHEIM, Mission SECRET (project-specific approvals)
Boot integrity protection	coreboot
Software version	2.8
Manipulation protection	Manipulation protection by security labels
Emission protection	Zone 1
Authentication token	SINA Smartcard

Technical data

General data	
Size (W x H x D)	386 x 299 x 32 mm
Weight	3.7 kg
Service compartment	Battery and battery pack
Performance data	
CPU	Intel® Core™ i7-3517UE, 1.7 GHz, 4 MB Intel® Smart Cache
Working memory	8 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 x 1080)
Interfaces	
USB 3.0	1x
USB 2.0	1x
Audio	HD sound, stereo speaker
Smart Card reader	Integrated, class 1
Network	1x Gbit LAN
Keyboard	Integrated, German, external keyboard can be attached
Mouse	Integrated touchpad, external mouse can be attached
Monitor	Mini Display Port
Temperature ranges	
Operation	-20 °C to +60 °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

More information:
www.secunet.com/en/sina