

SINA[®]

BUSINESS

Data and facts



secunet

Table of contents

secunet.
More than just
security.

Introduction	03
SINA Box.	04
Software specification.	06
SINA Box 3HE.	08
SINA Box 1HE.	10
SINA Box LE	12
SINA Box dual processor	14
SINA Thin Client	16
Software specification.	18
SINA Thin Client LE.	20
SINA Thin Client	22

secunet Security Networks AG is among the leading European service providers and product suppliers in the area of highly complex IT security solutions. With our focus on top security in information technology, we are market leaders in Germany.

In 1999, secunet was commissioned by the German Federal Office for Information Security (BSI) to realise a complex, high-protection data-processing system – under the project name “SINA” (Secure Inter-Network Architecture). The basic development of SINA technology is completed; SINA components are already successfully in use at numerous organisations.

This success and new requirements coming from our customers promote the further development of SINA: already established components are continuously updated, while new components complement the overall solution.

SINA Box

Software specification
and models

SINA Box Software specification

Operating system	
SINA LINUX	<ul style="list-style-type: none"> ▪ extremely minimised, hardened and equipped with security extensions ▪ bootable from CD or flash
Authentication tokens	
Smart cards	CardOS 4.01a and CardOS 4.3 (processor module certified according to ITSEC E4/high)
Cryptographic methods	
Symmetric	AES (192 bit) 3DES
Hash, (H)MAC	(HMAC-) SHA1 (HMAC-) RIPEMD 160
Asymmetric	RSA EC-GDSA Diffie-Hellman Parameter sets based on: <ul style="list-style-type: none"> • discrete logarithms (MODP) • elliptic curves (ECP)
Security standards	
	RFC 2104 (HMAC) RFC 2367 (PFKey) RFC 2401-2412 (IPSec) RFC 2459 (X509v3) RFC 2510/2511 (CMP) ISO/IEC 15946-2 (EC-GDSA)
Internet protocol standards	
IP	v4 v6, v4/v6- and v6/v4-tunnelling (on demand)
QoS	QoS DiffServ Codepoints (DSCP), bandwidth management for each security relation

Software-based encryption performance

Data throughput depending on:	Example configuration: Dual Pentium IV, 3.06 GHz with AES
<ul style="list-style-type: none"> ▪ packet size ▪ processor clock rate ▪ number of processors (multi-processor support) ▪ crypto methods ▪ key length 	<ul style="list-style-type: none"> ▪ > 300 Mbit/s maximum UDP, optimal packet size ▪ 270 Mbit/s TCP

Number of active tunnels

Depending on memory size	For example approx. 4,000 at 128 MByte
--------------------------	--

Certificates

Structure	X509v3 (IPsec / PKIX profile)
Management protocol	CMP
Attribute certificate	X.501/RFC 3281; clearance / category

Approvals

BSI (Germany)*	VS-NrD
----------------	--------

* Operational and security requirements according to the effective BSI approval certificate have to be followed.



SINA Box 3HE

PC hardware

Performance features	<ul style="list-style-type: none"> ▪ Intel® Pentium® 2.4 GHz 128 MB DDR-SDRAM ▪ CD-ROM drive ▪ smart card reader Kobil CT-B1-Pro with display and keypad ▪ 6 free slots for PCI cards ▪ power supply 115/230 V
Interfaces	keyboard, mouse, monitor, 2 x USB, audio
Authentication tokens	
Smart cards	CardOS 4.01a CardOS 4.3
Measurements	
Width	19" (approx. 482.6 mm)
Height	3 HE (approx. 132 mm)
Depth	approx. 450 mm
Weight (depending on the assembly)	approx. 16 kg
Temperature	
Operation	+15°C to +35°C
Transport	-25°C to +60°C
Power consumption	
Operation	approx. 100 watt
Stand-by	approx. 5 watt
Encryption performance	
Software (depending on the algorithm and IP parameters)	maximum 90 Mbit/s

Options

Network interfaces	10/100/1,000 Mbit Ethernet 10 Mbit fiber NIC 100 Mbit fiber NIC 1 Gbit fiber NIC up to 4 NICs
Compact flash card	different sizes
Approvals	
BSI (Germany)*	VS-NrD
Product code	
S11.212	SINA Box 19" rack (unzoned)

* Operational and security requirements according to the effective BSI approval certificate have to be followed.

Optional services

- **Software subscription for SINA Box software**
- **Telephone support**
5dx10h, Monday to Friday, 08:00 h - 18:00 h or
7dx24h, Sunday to Monday, 00:00 h - 24:00 h
- **Repair flat rate**
- **Maintenance flat rate**
- **Consulting service and installation service**
- **Service-level agreement (SLA)**
for a system with up to three NICs
 - Service level 1
Technical support: 24x7x365
Service hours (on site): Monday to Friday, 08:00 h - 17:00 h
Replacement period: next working day
 - Service level 2
Technical support: 24x7x365
Service hours (on site): Monday to Friday, 08:00 h - 17:00 h
Replacement period: 5 h
 - Service level 3
Technical support: 24x7x365
Service hours (on site): Monday to Sunday, 00:00 h - 24:00 h
Replacement period: 4 h



SINA Box 1HE

PC hardware

Performance features	<ul style="list-style-type: none"> ▪ Intel® Pentium® M CPU 1.8 GHz 256 MB RAM ▪ CD-ROM drive ▪ integrated card reader: Kobil CT-B1-Pro ▪ frontal compact flash adapter (CF to IDE)
Interfaces	4 x USB 2.0 DVI, audio, LPT, RS232 3 or 5 Ethernet NICs (10/100 Mbit) PS2 keyboard and mouse port

Authentication token

Smart cards	CardOS 4.01a and CardOS 4.3
Token	SINA USB smart card token

Measurements

Width	19" (approx. 482.6 mm)
Height	1 HE (approx. 44 mm)
Depth	approx. 480 mm
Weight	8.5 kg

Temperature

Operation	+5°C to +45°C
Transport	-20°C to +60°C

Power consumption

Operation	35 watt
Stand-by	5 watt

Encryption performance

Software (depending on the algorithm and IP parameters)	maximum 90 Mbit/s
--	-------------------

Approvals

BSI (Germany)*	VS-NrD
----------------	--------

Product code

S11.230	SINA Box 19" rack / 1HE, 3 x LAN
S11.231	SINA Box 19" rack / 1HE, 5 x LAN

* Operational and security requirements according to the effective BSI approval certificate have to be followed.

Optional services

- **Software subscription for SINA Box software**
- **Telephone support**
5dx10h, Monday to Friday, 08:00 h - 18:00 h or
7dx24h, Sunday to Monday, 00:00 h - 24:00 h
- **Repair flat rate**
- **Consulting service and installation service**
- **Service-level agreement (SLA)**
 - Service level 1
Technical support: 24x7x365
Service hours (on site): Monday to Friday, 08:00 h - 17:00 h
Replacement period: next working day
 - Service level 2
Technical support: 24x7x365
Service hours (on site): Monday to Friday, 08:00 h - 17:00 h
Replacement period: 5 h
 - Service level 3
Technical support: 24x7x365
Service hours (on site): Monday to Sunday, 00:00 h - 24:00 h
Replacement period: 4 h



SINA Box LE

PC hardware	
Performance features	<ul style="list-style-type: none"> ▪ Processor Via Eden 533 128 MB SDRAM ▪ power supply 115/230 V
Interfaces	3 x RJ45 network interfaces 10/100 Mbit 3 x USB interfaces 1 x serial interface keyboard, mouse, monitor
Authentication tokens	
	SINA USB smart card token (included in delivery)
SINA software	
Compact Flash card	128 MB
USB 2.0 token for SINA software updates	128 MB
Measurements	
Width	approx. 228.3 mm
Height	approx. 46.5 mm
Depth	approx. 165 mm
Weight	approx. 1.8 kg
Temperature	
Operation	+5°C to +45°C
Transport	-20°C to +60°C
Power consumption	
Operation	17 watt
Stand-by	3.5 watt

Encryption performance

Software (depending on the algorithm and IP parameters)	maximum 10 Mbit/s
--	-------------------

Approvals

BSI (Germany)*	VS-NrD
----------------	--------

Product code

S11.220	SINA Box LE (for VS-NrD)
---------	--------------------------

* Operational and security requirements according to the effective BSI approval certificate have to be followed.

Optional services

- **Software subscription for SINA Box software**
(update via USB token)
- **Telephone support**
5dx10h, Monday to Friday, 08:00 h - 18:00 h
7dx24h, Sunday to Monday, 00:00 h - 24:00 h
- **Repair flat rate**
- **Consulting service and installation service**
- **Service-level agreement (SLA)**
 - Service level 1
Technical support: 24x7x365
Service hours (on site): Monday to Friday, 08:00 h - 17:00 h
Replacement period: next working day
 - Service level 2
Technical support: 24x7x365
Service hours (on site): Monday to Friday, 08:00 h - 17:00 h
Replacement period: 5 h
 - Service level 3
Technical support: 24x7x365
Service hours (on site): Monday to Sunday, 00:00 h - 24:00 h
Replacement period: 4 h



SINA Box dual processor

PC hardware

Performance features	<ul style="list-style-type: none"> ▪ 2 x Intel® Xeon™ 3.06 GHz 2 x 512 MB DDR-SDRAM ▪ CD-ROM drive ▪ smart card reader Kobil CT-B1-Pro with display and keypad ▪ 5 free slots for PCI cards ▪ power supply 115/230 V
Interfaces	keyboard, mouse, monitor 2 x USB, audio
Authentication tokens	
Smart cards	CardOS 4.01a CardOS 4.3
Measurements	
Width	19" (approx. 482.6 mm)
Height	3 HE (approx. 132 mm)
Depth	approx. 450 mm
Weight (depending on the assembly)	approx. 16 kg
Temperature	
Operation	+15°C bis +35°C
Transport	-25°C bis +60°C
Power consumption	
Operation	approx. 200 watt
Stand-by	approx. 15 watt
Encryption performance	
Software	maximum 300 Mbit/s

Options

Network interfaces	10/100/1,000 Mbit Ethernet 10/100/1,000 Mbit fiber NIC up to 5 NICs
Compact flash card	different sizes
Approvals	
BSI (Germany)*	VS-NrD
Product code	
S11.221	SINA Box with dual processor 19" rack

* Operational and security requirements according to the effective BSI approval certificate have to be followed.

Optional services

- **Software subscription for SINA Box software**
- **Telephone support**
5dx10h, Monday to Friday, 08:00 h - 18:00 h
7dx24h, Sunday to Monday, 00:00 h - 24:00 h
- **Consulting service and installation service**

SINA Thin Client

Software specification
and models

SINA Thin Client Software specification

Operating system	
SINA LINUX	<ul style="list-style-type: none"> ▪ extremely minimised, hardened and equipped with security extensions ▪ bootable from CD or flash
Authentication tokens	
Smart cards	CardOS 4.01a and CardOS 4.3 (processor module certified according to ITSEC E4/high)
Cryptographic methods	
Symmetric	AES (192 bit) 3DES
Hash, (H)MAC	(HMAC-) SHA1 (HMAC-) RIPEMD 160
Asymmetric	RSA EC-GDSA Diffie-Hellman Parameter sets based on: <ul style="list-style-type: none"> • discrete logarithms (MODP) • elliptic curves (ECP)
Security standards	
	RFC 2104 (HMAC) RFC 2367 (PFKey) RFC 2401-2412 (IPSec) RFC 2459 (X509v3) RFC 2510/2511 (CMP) ISO/IEC 15946-2 (EC-GDSA)
Internet protocol standards	
IP	v4 v6, v4/v6 and v6/v4 tunnelling (on demand)
QoS	QoS DiffServ Codepoints (DSCP), bandwidth management for each security relation

Certificates	
Structure	X509v3 (IPsec / PKIX profile)
Management protocol	CMP
Attribute certificates	X.501/RFC 3281: clearance / category
Interaction with (terminal) servers	
RDP	Versions 4.0, 5.0 and 5.2 from Windows 2000 upwards: <ul style="list-style-type: none"> • printing from Windows XP/2003 Server upwards: <ul style="list-style-type: none"> • sound • COM-port interface rerouting (e. g. bar-code reader) • colour depth: up to 24 bit
ICA	Version 6.x <ul style="list-style-type: none"> • sound • printing • COM-port interface rerouting (e. g. bar-code reader) • colour depth: up to 24 bit (with corresponding metaframe version)
X11	Nativ, LBX
Number of parallel sessions	6
Approvals	
BSI (Germany)*	VS-NrD

* Operational and security requirements according to the effective BSI approval certificate have to be followed.



SINA Thin Client LE

PC hardware

Performance features	<ul style="list-style-type: none"> ▪ Processor Via Eden 533 128 MB SDRAM ▪ power supply 115/230 V
Interfaces	<ul style="list-style-type: none"> 3 x RJ45 network interfaces 10/100 Mbit 3 x USB interfaces 2 x serial interfaces, LPT, keyboard, mouse, monitor

Authentication tokens

	SINA USB smart card token (included in delivery)
--	---

SINA software

Compact flash card	128 MB
USB 2.0 token for SINA-software updates	128 MB

Measurements

Width	approx. 228.3 mm
Height	approx. 46.5 mm
Depth	approx. 165 mm
Weight	1.8 kg

Temperature

Operation	+5°C to +45°C
Transport	-20°C to +60°C

Power consumption

Operation	17 watt
Stand-by	3.5 watt

Approvals

BSI (Germany)*	VS-NrD
Product code	
S11.220	SINA Thin Client LE (for VS-NrD)

* Operational and security requirements according to the effective BSI approval certificate have to be followed.

Optional services

- **Software subscription for SINA Thin Client software**
(update via a USB token)
- **Telephone support**
5dx10h, Monday to Friday, 08:00 h - 18:00 h or
7dx24h, Sunday to Monday, 00:00 h - 24:00 h
- **Repair flat rate**
- **Consulting service and installation service**
- **Service-level agreement (SLA)**
 - Service level 1
Technical support 24x7x365
Service hours (on site): Monday to Friday, 08:00 h - 17:00 h
Replacement period: next working day
 - Service level 2
Technical support 24x7x365
Service hours (on site): Monday to Friday, 08:00 h - 17:00 h
Replacement period: 5 h
 - Service level 3
Technical support 24x7x365
Service hours (on site): Monday to Sunday, 00:00 h - 24:00 h
Replacement period: 4 h



SINA Thin Client

PC hardware

Performance features	<ul style="list-style-type: none"> ▪ Processor Intel® Celeron® 2.0 GHz 128 MB SDRAM ▪ smart card reader Kobil CT-B1-Pro with display ▪ power supply 115/230V
Interfaces	1 x RJ45 network interfaces 10/100 Mbit 3 x USB interfaces 1 x serial interfaces, LPT, keyboard, mouse, monitor CD-ROM drive

Authentication tokens

Smart cards	CardOS 4.01a or SINA USB smart card token
-------------	---

SINA software

Compact flash card	128 MB (optional)
USB 2.0 token for SINA-software updates	128 MB

Measurements

Width	approx. 393 mm
Height	approx. 112 mm
Depth	approx. 356 mm
Weight	approx. 10 kg

Temperature

Operation	+15°C to +35°C
Transport	-25°C to +60°C

Power consumption

Operation	100 watt
Stand-by	approx. 5 watt

Approvals

BSI (Germany)*	VS-NrD
----------------	--------

Product code

S12.213	SINA Thin Client
---------	------------------

* Operational and security requirements according to the effective BSI approval certificate have to be followed.

Optional services

- **Software subscription for SINA Thin Client software**
- **Telephone support**
5dx10h, Monday to Friday, 08:00 h - 18:00 h or
7dx24h, Sunday to Monday, 00:00 h - 24:00 h
- **Consulting service and installation service**

Editor

secunet

secunet Security Networks AG
Kronprinzenstrasse 30
45128 Essen
Germany
SINA hotline +49 1805-76 55 55
(0.14 Euro/min. from the German landline network)

www.secunet.com
sina@secunet.com

SINA is a registered trademark by secunet Security Networks AG.

Please take into account that the technical specifications and data published here cannot be up to the minute. All information refers to the status in March, 2007. secunet reserves the right to change the scope of delivery and to carry out technical modifications.