



Mobile Security Device GeNUCard 2

Facts & Features

Definition:

The GeNUCard is an autonomous mobile security device for laptops or workstations at home offices. Based on its own processor, memory, and operating system, it features a firewall and VPN gateway, and creates encrypted connections for data transfer via Internet to a remote LAN. The GeNUCard is connected to the laptop or computer via USB and works with Windows XP (from SP3), Windows Vista, Windows 7, Linux (from Kernel 2.6), and OpenBSD.

Typical Use:

With GeNUCard, mobile users or colleagues at home office can securely exchange data via VPN with the LAN, e.g. of a public authority or company.

Throughput Volume:

- Firewall: 100 MBit/s
- VPN: 12 MBit/s

Customer Service:

- Customer service directly from the manufacturer GeNUA
- Hotline service / update service
- Comprehensive training courses



Reasons to Choose GeNUCard:

- Autonomous computer with its own processor, memory, and hardened operating system
- Easy to use via USB
- Plug & play with every laptop or workstation
- Flexible connection options via Ethernet (LAN/DSL), WLAN, UMTS or USB (e.g. Bluetooth)
- Communication is restricted to permitted connections
- Encrypted data exchange over public networks
- Authentication and key handling via smart card
- Approval for German, NATO and EU classification level "Restricted" upcoming
- Full IPv6 support
- Central management of numerous devices by IT department

Reasons to Choose GeNUA:

- Leading German specialist for IT security
- Founded in 1992 – implementation of numerous major projects for industrial, government, and military organizations



Firewall

Stateful packet filtering	State of the art firewall for manageable rulesets
Quality of service (QoS)	Guarantee service priorities
Queuing (traffic shaping)	Bandwidth management to control traffic volume
Filter criteria	Filtering decision can be based on IP address, network protocol, port, interface, flags and state
Filter action	Choice of packet handling: pass, block or drop
DDoS protection	Proxy for the TCP handshake to protect against TCP SYN floods often used by distributed denial-of-service attacks
Spoofing protection	Block forged packets
Packet normalisation	Reassemble fragmented packets, generate random IP identification, enforce IP header settings such as TTL and MSS

Virtual Private Network

General	
IPsec	Network layer VPN
NAT-Traversal (NAT-T)	Supports connections between NATed devices
Authentication	
RSA	De facto public-key standard for easy key exchange
Smart card	For secure key storage (optional)
Algorithms	
Encryption	AES, 3DES, (Blowfish, CAST)
Hashes	SHA2, SHA1, MD5

Networking

General	
NTP client	Obtain time from NTP servers
DHCP server	Automatically assign IP address to client
Uplinks	
Ethernet	10/100 Mbit/s Base-T
WLAN	802.11b/g (optional)
UMTS/GPRS	Integrated UMTS modem (optional)
PPPoE	For DSL
Bluetooth	For cell phone or satellite uplink (optional)
Satellite	Performance boost for satellite uplinks (optional)
Proxies	
SIP	Leading signaling protocol for Voice over IP
FTP	Support for File Transfer Protocol
DNS	Local DNS resolver



Monitoring

System	System status (memory, load)
VPN	Supervise VPN connection status
SNMP	Provide information via SNMP GET requests, or send SNMP TRAPs

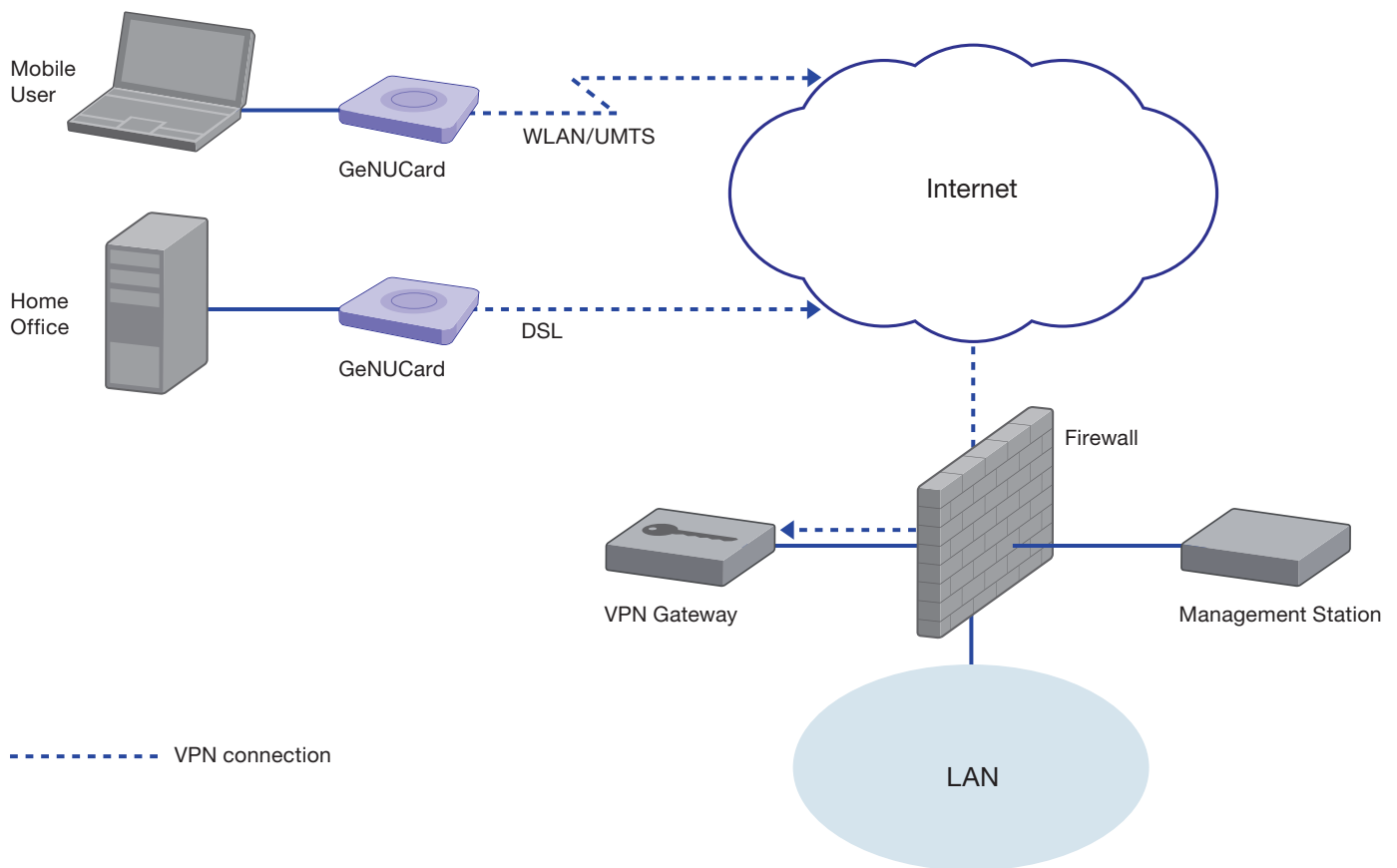
Central Management with GeNUCenter

General	
Configuration	Easy management of several (thousand) systems
Monitoring	See the health of your systems at a glance
Logging	Easily collect and analyse logs
Software (patches/update)	Distribute the latest software revision
Rollout management	Freely define when to update/upgrade which system
Web GUI	Powerful web-based user interface secured with TLS/SSL (HTTPS)
Online help	Instant help in the user interface
Console	SSH for shell access
Patch Management	
GUI	Get and install patches via GUI
Automatic updates	Automate the process of fetching updates for the appliance
Patch rollback	Return to previous patch level
Logging	
Syslog	Use a third party syslog server to store logs
Local cache	For short term logs
Central	Use GeNUCenter to concentrate the logs on one system
Debugging	
Network	Powerful commandline tools: tcpdump, traceroute, ping etc.
Firewall	Monitor firewall state, rules and logs
VPN	VPN connection status overview and problem analysis



Application Example

Field staff need to access data in the protected LAN via the Internet. Therefore laptops of mobile users as well as the workstations at home offices are outfitted with GeNUCards. Employees receive a smart card and PIN for authentication. For authorized connections, the GeNUCard creates a strongly encrypted Virtual Private Network (VPN) using DSL, UMTS, LAN or WLAN as transfer technologies.



Further information:

www.genua.eu/genucard

