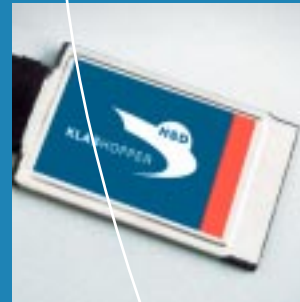


The Complete PC solution for the STE

KLASHOPPER



Making PC Encryption Easier



Making PC encryption easier

What is KlasHopper?

KlasHopper makes it easy to browse the Internet, transfer files, send and receive emails and perform real-time videoconferencing using a PC connected to a STE. KlasHopper is a PC card that easily installs in a laptop or desktop PC. KlasHopper supports all popular Windows operating systems including Windows 95/98, Windows Me, Windows NT 4.0, Windows 2000 and Windows XP.

Easy To Use

Traditionally, setting up an encrypted communications channel with a PC has been very complex. KlasHopper is designed specifically with ease of use in mind. It replaces a complex router with a mobile, portable and easy to use solution designed specifically for the STE. It installs in minutes and appears in Dial-Up Networking just like a regular modem. KlasHopper comes with user guides containing detailed configuration instructions for many typical networking scenarios with the STE.

Not Needed At Both Ends

KlasHopper is not required at both ends of the connection and can communicate with existing STE installations. It can connect to any remote device including routers and popular ISDN Terminal Adapters that support PPP. Therefore, the user can connect to STE encrypted sites that may not be using KlasHopper.

Includes All Necessary Cables

KlasHopper is supplied with STE cables as standard. KlasHopper includes integrated cables that connect directly from the PC to the STE. The STE connects directly to ISDN.

High Speed (64K/128K)

KlasHopper is the only card of its kind that supports full duplex data transfer rates up to 128K. KlasHopper uses a special optimized algorithm designed specifically to provide higher throughputs. This allows a user make maximum use of their ISDN or satellite channels to send data at 64K or 128K.

Supports Popular Networking Applications

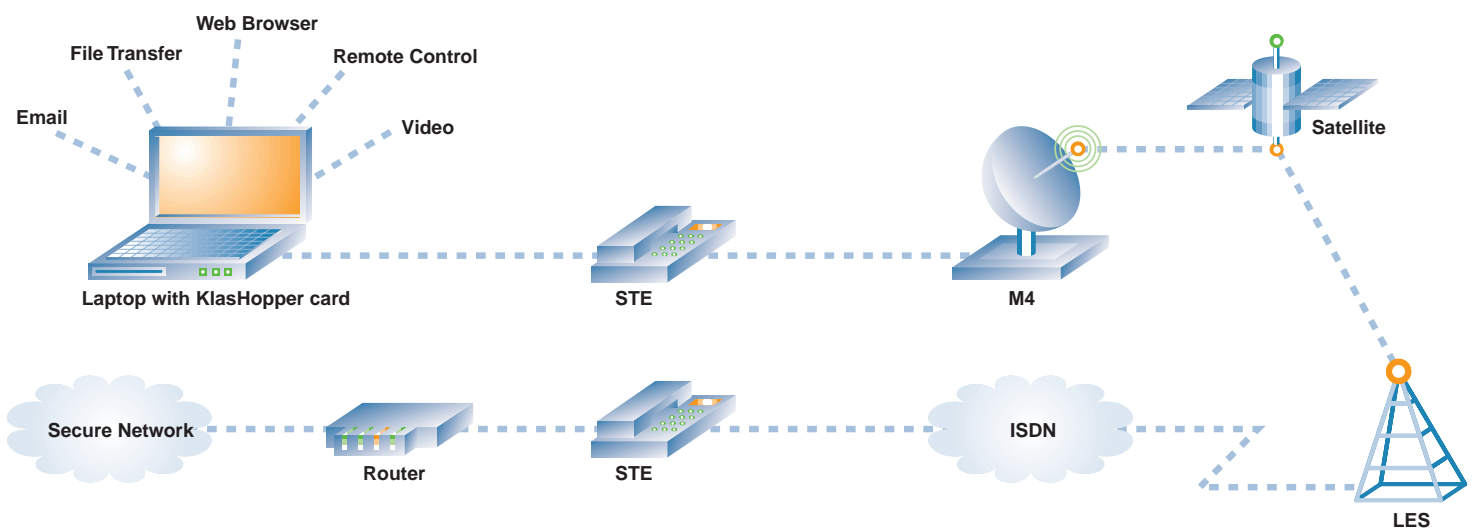
KlasHopper supports standard email, networking, file transfer and videoconferencing applications including Outlook, Outlook Express and Internet Explorer. KlasHopper works with all standard networking protocols including PPP, TCP/IP, NetBEUI and IPX/SPX.

Converts a PC into an Encrypted Server

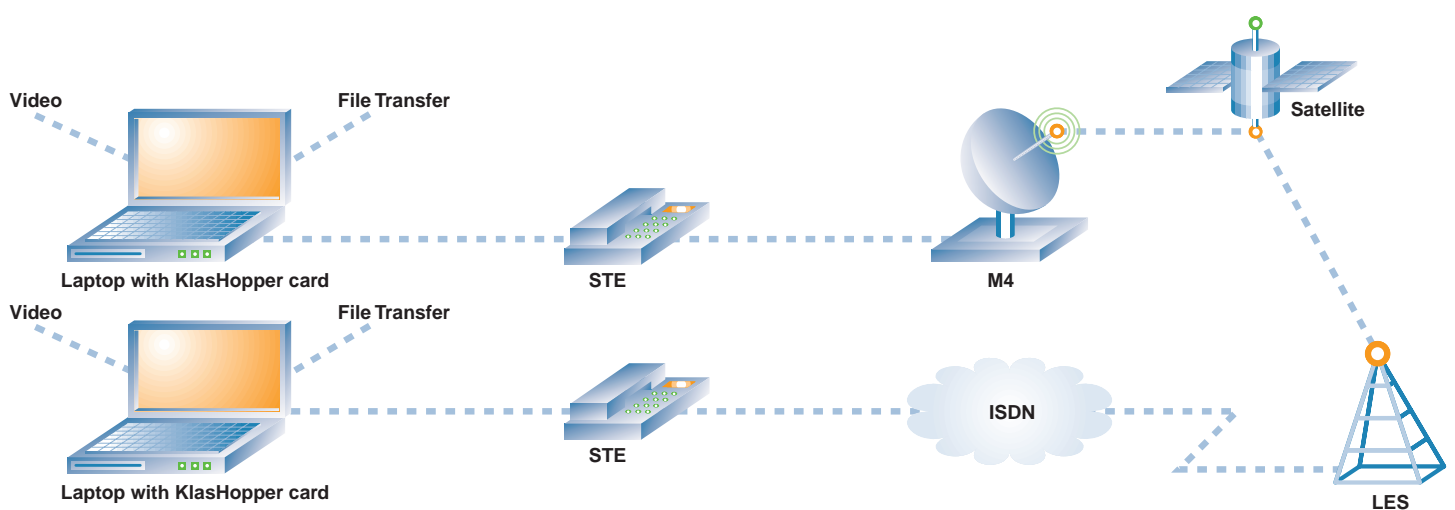
KlasHopper in combination with KlasPeer2Peer makes it easy to configure a PC as a dial-in server. KlasHopper automatically monitors the attached STE for indications of an incoming call. When a remote user connects, KlasHopper will answer the call and automatically assign all the required networking resources. This allows a non-technical user to easily transform their PC into an encrypted STE server.



➔ **Connecting PC applications to a secure network with a STE over satellite and ISDN**



➔ **PC to PC file transfer and videoconferencing with a STE over satellite and ISDN**



Klas Application Software

KlasHopper is the perfect platform for Klas' networking, file transfer and videoconferencing products. KlasPeer2Peer makes it easy to dial and answer a call with a STE for PC to PC based file transfer. KlasVideoHopper is a PC-based videoconferencing product that supports live audio and video communication between two PCs. KlasPeer2Peer and KlasVideoHopper are designed specifically for STE encrypted communications at 64K and 128K. Please contact Klas for more details on these products.

Encryption Devices

STE in synchronous RS-232 or RS-530 mode
BRENT in synchronous X.21 mode
KIV-7 in synchronous RS-232 or RS-530 mode

Operating Systems

Windows 95
Windows 98
Windows 98 Second Edition
Windows Me
Windows NT 4.0
Windows 2000
Windows XP

Interfaces

Synchronous RS-232
Synchronous RS-530 (RS-422)
Synchronous RS-449 (RS-422)
Synchronous X.21

Applications

Dial-Up Networking (RAS)
Remote LAN access
Email (Outlook, Outlook Express etc.)
Browser (Internet Explorer, Netscape etc.)
File Transfer (WS_FTP, Internet Explorer etc.)
H.323 Videoconferencing (NetMeeting)
H.323 Audio (NetMeeting)

Communications Devices

ADTRAN ISU 2x64 Terminal Adapter
Motorola BitSURFR
Multi-Tech MT2834
Multi-Tech MTA128ST
Inmarsat B HSD
Inmarsat M4

Remote Device Support

Router
ISDN Terminal Adapter
ISDN CAPI Card

Cables

RS-232 DB-25
RS-530 DB-25
RS-449 DB-37
X.21 DB-15
KIV-7 Red RS-232 DB-37
KIV-7 Red RS-530 DB-37
KIV-7 Black RS-232 DB-37
KIV-7 Black RS-530 DB-37

Line Protocols

PPP over HDLC (RFC 1618)
HDLC

Networking Protocols

PPP
IP
TCP/IP
UDP
NetBEUI
IPX/SPX
PAP
SPAP
CHAP
MS-CHAP
MS-CHAP v2

Telecommunications Networks (via suitable communications device)

ISDN (64K/128K)
PSTN
Satellite (Inmarsat B HSD, Inmarsat M4)

Software

PCMCIA : NDISWAN Driver
PCI : TAPI Driver

PC Requirements

233 MHz Processor
32MB RAM
20MB Hard Disk free
PCMCIA : Free laptop card slot
PCI : Free desktop card slot
No external box
or power supply required

Dial/Answer Modes

Hot (DTR) Dial
Manual Dial
Hot (DCD) Answer
V.25bis Dial

Speeds

300 bps to 128K bps (auto-sensing)

Clocking

External Tx and Rx independent
External Tx slaved to Rx

Hardware

PCMCIA : Type II (5mm) card
PCI : Half-length PCI board

Standards

CE Mark
FCC Approved
Fully tested for Y2K compliance

Card Types

KlasHopper 200 PCMCIA
- PCMCIA card supporting RS-232
KlasHopper 400 PCMCIA
- PCMCIA card supporting RS-530/RS-449/X.21
KlasHopper 200 PCI
- PCI card supporting RS-232
KlasHopper 400 PCI
- PCI card supporting RS-530/RS-449/X.21



KLAS LTD., BRACETOWN BUSINESS PARK, CLONEE, CO. MEATH, IRELAND.
EMAIL: sales@klasonline.com WEB: www.klasonline.com

USA

TOLL FREE PHONE: 1-866-263-5467
TOLL FREE FAX: 1-866-532-3091

UK

TOLL FREE PHONE: 0800-056-4250
TOLL FREE FAX: 0800-056-4366

CANADA

TOLL FREE PHONE: 1-866-296-5199
TOLL FREE FAX: 1-866-237-0879

INTERNATIONAL

PHONE: +353-1-662-4270
FAX: +353-1-662-4272



Making PC Encryption Easier

Copyright © 2003 Klas Ltd. All rights reserved. All company and brand names are trademarks or registered trademarks of their respective owners. Specifications are correct at date of publication but subject to availability or change without notice.