

The Complete PC Solution for any M4 terminal at 64K and 128K



The Connectivity People





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What is KlasHopper M4?

KlasHopper makes it easy to browse the Internet, transfer files, send and receive emails and perform real-time videoconferencing using a PC connected to an M4 terminal. KlasHopper M4 is a PC card that easily installs in a laptop or desktop PC. The card is not needed at both ends and will communicate with any router or ISDN TA. KlasHopper M4 supports all popular Windows operating systems including Windows 95/98, Windows Me, Windows NT 4.0, Windows 2000 and Windows XP.

Tested with all M4 terminals

KlasHopper M4 supports Euro-ISDN as default and has been tested with the leading single-channel (64K) and dual-channel (128K) M4 terminals: Nera WorldCommunicator Thrane&Thrane Capsat Messenger, MTI M4-128 and e-Lite Inmarsat M4 terminal. KlasHopper M4 also supports a # symbol that is required when dialing with an M4 terminal.

Free Technical Support

Klas offer free technical support for all KlasHopper M4 users. Klas are satellite communication experts and are happy to provide comprehensive technical support to our customers.

Optimisation and TCP/IP

KlasHopper M4 installs two independent dial-up devices which integrate fully into the Windows operating system. This means that they use the built-in TCP/IP stack of Windows which is much easier to optimise for satellite than stand-alone TCP/IP stacks found in routers or external TAs. For example, Windows 2000/XP have self-tuning TCP/IP stacks that work well over satellite. However, an external TA with it's own TCP/IP stack can often cancel out the benefits of the Windows self-tuning stack.

Dial and Answer at 128K

KlasHopper M4 can be configured to dial and answer calls at 128K in all Windows operating systems. To establish a 128K connection, simply install two KlasHopper M4 cards in the one PC (Supported in Windows 98/Me/2000/XP). Each card will connect to a single-channel (64K) M4 terminal giving a total connection of 128K. The cards can also bundle dual-channel (128K) M4 terminals for speeds of 256K. Bundling data calls over Inmarsat has never been so easy.

Full OS Support

KlasHopper M4 supports all major Windows operating systems including Windows 95/98/Me, NT 4.0 and Windows 2000/XP.

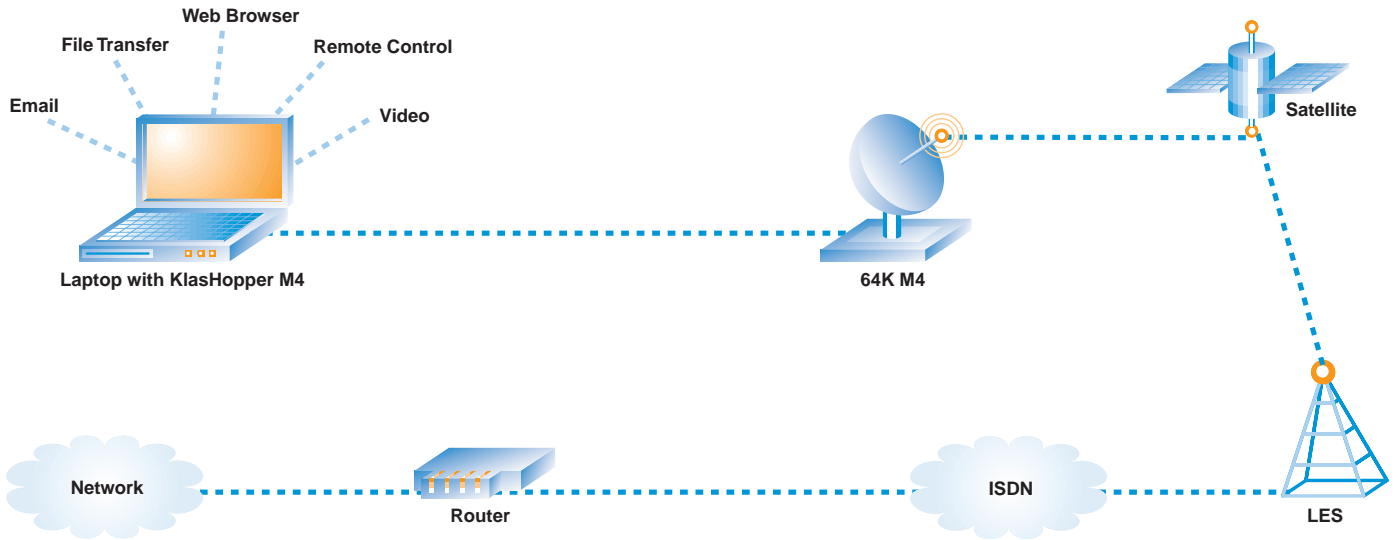
Converts a PC into a Server

KlasHopper M4 combined with KlasPeer2Peer makes it easy to configure a PC as a dial-in server. KlasHopper M4 automatically monitors the attached M4 terminal for indications of an incoming call. When a remote user connects, KlasHopper M4 will answer the call and automatically assign all the required networking resources. This allows a non-technical user to easily transform their PC into a server.

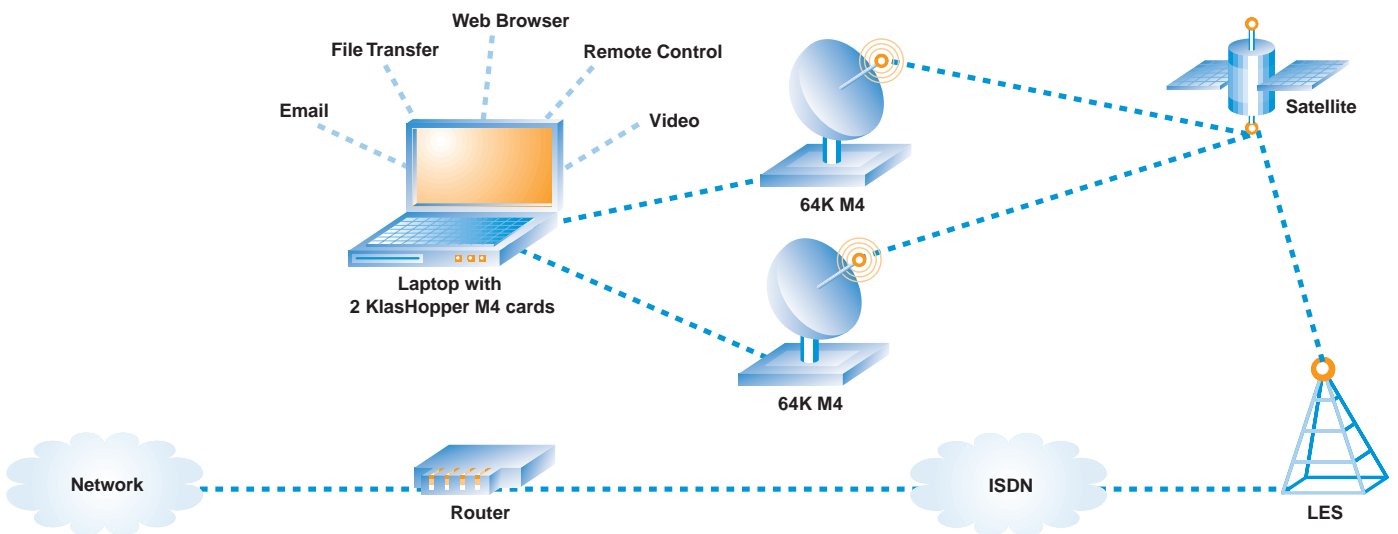


Schematics

➔ Connecting PC applications to a network with an M4 over satellite and ISDN at 64K



➔ Connecting PC applications to a network with 2 M4s over satellite and ISDN at 128K



Klas Application Software

KlasHopper M4 is the perfect platform for Klas' networking, file transfer and videoconferencing products. KlasPeer2Peer makes it easy to dial and answer a call with a M4 terminal for PC to PC based file transfer. KlasPeer2Peer is designed specifically for M4 terminal communications at 64K and 128K. Please contact Klas for more details on these products.

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KlasHopper M4 PCMCIA



KlasHopper M4 PCI



GAN terminals

Nera WorldCommunicator
Thrane&Thrane
Capsat Messenger
MTI-M4-128
e-Lite Inmarsat M4 terminal

Operating Systems

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

Interfaces

RJ-45 ISDN

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)

Remote Device Support

Router
ISDN Terminal Adapter
ISDN CAPI Card

Cables

RJ-45 ISDN

Line Protocols

PPP over HDLC (RFC 1618)

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)
Satellite (Inmarsat M4)

Software

PCMCIA : NDISWAN 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

Hardware

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

Standards

CE Mark
Fully tested for Y2K compliance



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