



# ***OPERA*** *4.12e*

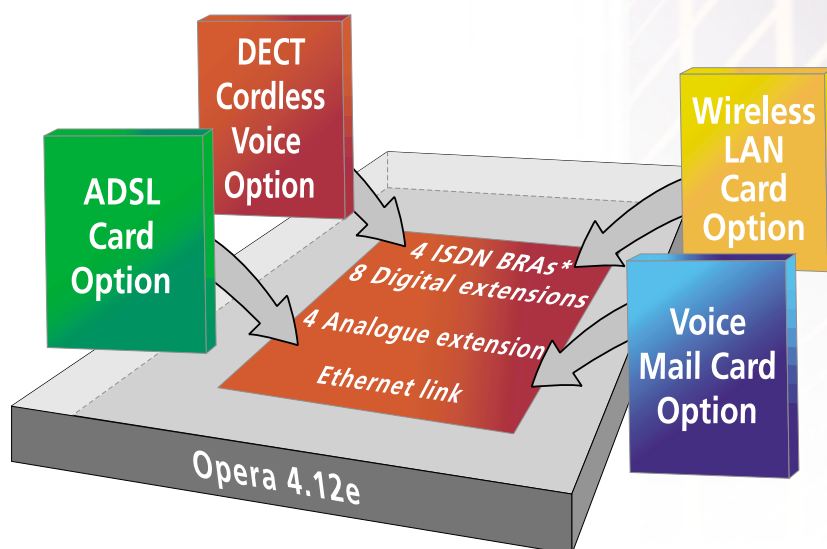
Small Business Voice and Data Exchange

*THE COMPLETE COMMUNICATIONS  
SOLUTION FOR SMALL BUSINESS*

The logo for mds gateways, featuring a stylized blue and green swoosh above the lowercase text 'mds gateways'.

## THE COMPLETE SMALL BUSINESS COMMUNICATIONS SOLUTION

The Opera 4.12e from MDS Gateways integrates all the communications' needs of a small business into a single platform which includes Internet access, wired and wireless voice and data, voicemail, e-mail and computer telephony. This product enables small and medium enterprises to benefit from all these technologies simply and quickly. Through excellence in design, ease of use, reliability, functionality and cost effectiveness are achieved in one powerful communications tool.



\* One of the public ISDN interfaces may be customer configured as an internal S<sub>0</sub> bus. Each ISDN line is equivalent to two conventional lines or channels.

### Flexible

The digital switch may be configured to suit the prevailing market conditions with a combination of ISDN lines and ADSL on the public side and wired and wireless data and voice ports internally.

### Internet Access

The Opera 4.12e enables shared access to the Internet for networked PCs. It incorporates a router that can provide access for your LAN to the public network. This facilitates e-mail traffic and Internet access for LAN clients over the ISDN or the broadband ADSL connection.

### Voice Calls

Voice calls are handled with the full functionality of a traditional PBX. Calls can be made, received, placed on hold, and transferred from any extension on the system to any internal or external party. This includes ISDN terminals connected to the internal S bus or even DECT handsets. The Opera 4.12e supports all commonly used ISDN services such as Call Completion to Busy Subscriber (CCBS), Explicit Call Transfer (ECT) and External Divert.





# OPERA 4.12e

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## Remote Access

Opera 4.12e acts as a gateway to the LAN for a road warrior or home worker on an ISDN dial-up connection.

## Virtual Private Networking (VPN)

Remote teleworkers can access the LAN through ADSL or ISDN lines with permanent IP address on the Opera 4.12e and download files and e-mails at high speed availing of the built-in VPN encryption. Voice VPNs which offer a single numbering plan covering several Opera 4.12e at different sites are also supported.

## Firewall

A static or packet filtering firewall is included as standard.

## Router Security

The router security features include Network Address Translation (NAT) and Port Address Translation (PAT). These features allow the use of private IP addresses on the LAN which are shielded from the public Internet.

## Unified Messaging

With the optional Unified Messaging server, incoming voice calls can be stored as voicemails on an existing LAN mail server. They are then automatically sent to the appropriate recipient. The user simply opens e-mail in the normal way and double clicks a voicemail message. This can be played over the PC speakers or the telephone. As it is formatted like an e-mail it can be saved, deleted or forwarded in the same way.

## Least Cost Routing (LCR)

You can program carrier details into the Opera 4.12e and route calls over preferred carrier

networks at various times. The switch is supplied with software that allows you to manage least cost routing.

## System Programming

Browser based programming allows you to customise the system to your particular needs. This can be done from a PC connected to the LAN or connected directly to the switch, or indeed from a remote site. When new features and software releases become available, your Opera 4.12e can be remotely upgraded from a server.

## Operafone D1 Key Set

The Operafone D1 is a system telephone designed for easy access to the broad range of features of the Opera 4.12e switch. It is a two-wire digital set with handsfree and headset operation and a four line, context sensitive, interactive display. Programming with the inbuilt mouse pad is simple and is supported by context sensitive prompts. The 16 programmable keys and leds are easily assigned as function keys, speed dial keys or line/extension keys.

## Standard Telephones

In addition to the Operafone D1, you can also connect standard analogue telephones, ISDN telephones, fax machines, answering machines, DECT cordless telephones, payphones and modems.

## Voice Mail Option

Opera 4.12e can provide voicemail with a pre-configured voice card option that offers up to 2 hours of stored messages over two channels.

## ADSL Option

This pre-configured option allows you to benefit from the huge increase in bandwidth of ADSL



technology, to surf the net or download large files at high speed. The "always on" aspect of ADSL makes it easier to control costs.

## Computer Telephony Option

Using Caller ID details in conjunction with database information stored on a LAN server, you may route calls to particular agents while at the same time popping information about the caller on the agent's screen. The agent can review the caller's details before answering, rejecting or passing on the call. A call may also be dialled from an agent's screen.

## Wireless LAN Option

The wireless LAN feature allows you to connect several PCs to your local area network using radio links instead of cables. The use of IEEE 802.11b technology (WiFi standard) gives the small business the freedom and flexibility of wireless networking.

## SDSL Evolution

The Opera 4.12e is ready for the next symmetric DSL technology. An SDSL option offers symmetric broadband.

## Technical Overview

### Capacity

Four ISDN public BRAs or three ISDN public BRAs and one internal S<sub>0</sub> Bus  
Eight 2-wire digital extensions  
Four analogue a/b extensions  
One Ethernet port  
ADSL, Voice mail, WIFI, DECT optional

### Data Router Functionality

Bandwidth management of B channels  
Browser based programming  
DHCP  
DNS relay  
Firewall: Static or packet filtering  
IEEE 802.1d transparent learning bridge  
Internet Access Control  
IP Address negotiation and login to ISP  
IP Packet Routing from LAN to ISDN or ADSL  
NAT/PAT  
VPN protocols over ADSL: PPTP, L2TP, IPSEC

### ADSL Modem Functionality

G.dmt (Annex A or B), G.lite, ANSI T1.413 Issue 2  
Data Protocol Encapsulation  
Multiple Protocol over ATM (MPoA) (RFC 1483)  
PPP over ATM (PPPoA) (RFC 2364)  
PPP over Ethernet (PPPoE) (RFC 2516)

### System Management

Browser based local or remote programming  
Remote firmware upload  
Configuration backup

### Computer Telephony Integration

TAPI 2.1 and partial TAPI 3.0

### Power

220V ac with battery backup

### Physical Interfaces

ISDN T	RJ45
ISDN S <sub>0</sub>	RJ45/Push Wire
ADSL	RJ45
Ethernet	RJ45
Extensions	Push Wire
RS 232	D9
Battery (BBU)	Cage Clamp
External Relays(2)	Push Wire



MDS Gateways  
Clonshaugh Industrial Estate,  
Dublin 17, Ireland  
Tel: +353-1-816 0000  
Fax: +353-1-848 8825  
Email: info@mdsgateways.com  
www.mdsgateways.com

Specifications subject to change without notice.  
Facilities described may or may not be supported by your network.  
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### Voice Functionality

Auto answer	COLP, COLR
Alarm Calls (Internal)	Conference Call (Internal and External)
Analogue CLI	Do Not Disturb
Barge-In	Enquiry Call
Browser Based Programming	Flexible numbering
Call Barring	Handsfree Operation
Call Brokerage	Headset ready
Call Deflection	Hotline
Call Diversion	Least Cost Routing
Call Hold	MSN Assignment
Call Logging	Messaging (Internal)
Call Paging	Night Service
Call Park	Programmable Keys 16
Call Pick-up/Call Pick-off	Re-dial
Call Protection	Room Monitor
Call Transfer	Speed Dial
Call Waiting	Terminal portability
Central Bell	User PIN Code
CCBS	Voicemail
CLIP, CLIR	

