Commuting in reverse—bringing the office to mobile workers

IBM 8235 Dial-In Access to LANs (DIALs) Server Models 051 and 052

Highlights

- ***Fast, responsive access***
- ***Two-port, low-cost solution for small offices***
- ***Multitiered security***
- ***Easy expandability***
- ***More than 120 preconfigured options for easy installation***
- ***Applications that appear the same to both mobile and office users***
- ***Centralized configuration and management, including status and activity monitoring***
- ***RADIUS accounting management***
- ***Support for LAN applications using popular NetBIOS, IPX, IP and SNA protocols***
- ***IP filtering and Domain Naming Services (DNS)***
- ***Connections over regular or digital phone networks***
- ***Powerburst option***

Employee benefits—more flexibility, higher productivity, improved morale

With the 8235 Dial-In Access to LANs (DIALs) Server, your remote users can get to their office Ethernet or Token-Ring network from any location that has dial-up phone service.

Employees who travel or work from home or remote offices can get to any of the information they need, just as if they were using the workstation in the office. Mobile workers—sales and service representatives, agents and others—can get to product data, inventories, prices and work schedules from home, a customer location or while they're traveling.

The 8235 is a compact, stand-alone device that can rest on a desktop. The variety of hardware models is combined with software that offers the features and benefits that users and managers need to create one powerful, affordable package.

Low-cost solution for small offices

The 8235 Models 051 and 052 are designed to address the needs of customers wanting full-function support for remote LAN access in small office environments. These smaller, low-cost versions of the eight-port, external-modem models of the 8235 have two serial ports to which you can connect modems or external, asynchronous terminal adapters.



High performance can be achieved with high-speed V.34bis modems with compression, either through the modem or through the compression supported by the 8235 with the DIALs Client software, or with asynchronous terminal adapters attached to high-speed digital networks.

Multiuser, multiprotocol, multifunction

With routing and bridging support for multiple protocols such as NetBIOS for LAN servers, IPX for NetWare, 802.2 LLC for the 3270 Information Display System and 5250 Display System, IP for TCP/IP applications on both Token-Ring and Ethernet models and AppleTalk on Ethernet with ARA 2.0 clients, users can remotely access a variety of applications. And the 8235 supports dial-up LAN-to-LAN routing and dial-out modem-pooling and line-pooling.

Both ports can operate simultaneously, using special filtering and compression techniques to reduce the amount of network traffic. PPP and support for transmission speeds up to 115.2 Kbps over analog phone networks also contribute to optimum, remote-access performance.

Network protection with multitiered security

Models 051 and 052, along with the DIALs Server software, offer extensive security options with integrated support for several third-party hardware devices. In addition to support for Windows 95 applications, the DIALs software offers integrated support for the RADIUS management and accounting protocol, the SecurID card and the ACE Server, AssureNet Pathways Security Server, Terminal Access Controller Access Control System (TACACS and TACACS+) and the Blockade Mainframe Security Server.

Transparent access to network resources—anytime, anywhere

The 8235 in the office works with IBM DIALs Client software in OS/2®, DOS and Windows® PCs outside the office, with 8235s in other offices or to access remote services from an office workstation.

Refer to *IBM 8235 Dial-In Access to LANs (DIALs) Software Release* (G224-4440) for more information about the software supporting the 8235 DIALs Server.

For remote access, authorized remote users simply call an 8235 using ordinary telephone lines or digital networks and get connected to the office network. They can transfer files, print documents, use e-mail and other client or server applications and access databases. There are no new commands or complicated procedures to learn.

Network managers can also use the 8235 as a dial-up router between locations for LANs connected by IP and IPX protocols, and as a modem-pooling device for access to services like CompuServe and the Internet. Having remote access, dial-up routing and modem-pooling in a single device is simpler and costs less than having multiple devices.

Dial-in performance can be improved for file-system-based activities and applications through the use of Powerburst acceleration support, an optional feature on all 8235 models.

Comprehensive management

The 8235 includes Windows software that lets you configure, monitor and upgrade any number of 8235s from a single, local or remote workstation. You can also manage your 8235s using an Nways™ Manager, Nways Campus manager or SNMP manager. You can keep an activity log that records each incoming call from beginning to end, as well as any error conditions that exist. The activity log can be easily exported to another application for more detailed analysis. The management software also provides complete status information on all 8235s on your network.

An expandable solution

The function of the 8235 is also available as an eight-port server. This means that you can get started today with a two-port model and have the flexibility to expand or scale up with any combination of 8235s, using the same remote client software.

What you get

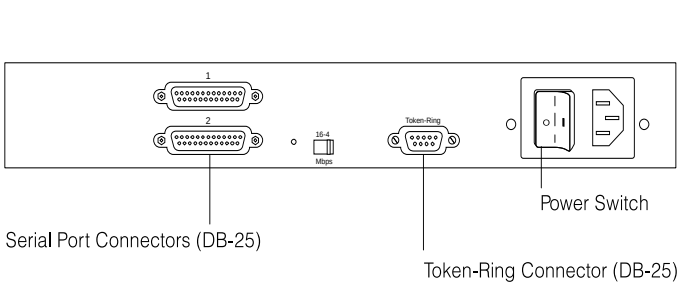
Included with each 8235 package are the following features:

- 8235 Management Facility
- Dial-in client software for:
  - OS/2
  - DOS
  - Windows 3.1 or 3.11
  - Security Pack for Windows 95
- Dial-out client software for:
  - OS/2
  - DOS
  - Windows 3.1 or higher
  - Windows 95 client or Windows NT® client
- LAN-to-LAN Connect software for Windows 3.1 or higher
- An online user's guide for each client software package

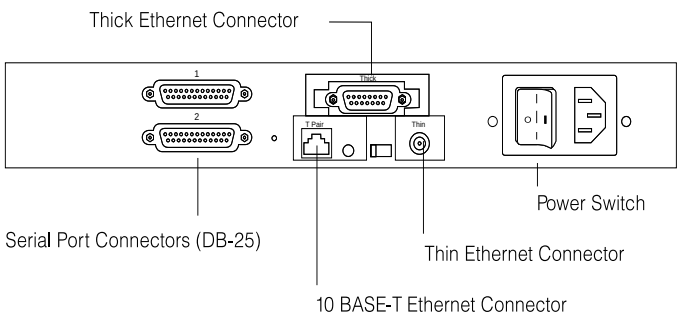
IBM 8235 DIALs Server Models 051 and 052 at a glance

Part numbers	*Hardware and software** 55H8540: 8235 DIALs Server Model 051 (Token Ring) 55H8570: 8235 DIALs Server Model 052 (Ethernet) *Software only* (Chargeable)* 00K5017: Software key for Powerburst for 2-port models
Configuration	• Processor: 25-MHz Motorola 68EC020 • Memory: 2-MB nonvolatile RAM • Serial ports: 2 DB-25 (EIA 232) serial port connectors • Supported modems: 8235 Models 051 and 052 are compatible with asynchronous analog modems including V.34bis modems or ISDN terminal adapters supporting the EIA 232 V.24/V.28 digital interface, operating at speeds between 2.4 Kbps and 115.2 Kbps per port, including modem data compression. (For remote networking 9600 Kbps or higher is recommended.) • Supported protocols: NetBIOS, IPX/SPX, TCP/IP, 802.2 (LLC), AppleTalk ARA 2.0 (Model 052), PPP and SLIP
8235 DIALs Server	The 8235 supports dial-in communications for workstations operating with the DIALs Client licensed program, Windows 95 RAS client, Windows NT 3.5 RAS client or higher, SLIP, PPP or Telnet dialers. Installation and management of the 8235 are recommended using a WIN-OS/2 window with the IP protocol or a Windows-based workstation with IP or IPX loaded with the included 8235 management software.
Hardware requirements	Any PC or PS/2® computer with a 386 or higher processor and OS/2 2.11 or higher, or Windows 3.1 or higher or a 286 or higher processor and DOS 3.3. Any Macintosh Plus or later model workstation with 4 MB of RAM and a hard disk running ARA 2.0 dial-in support on System 7.0 software or higher is supported. (For remote networking the 16550 UART on the client PC is recommended.)
Cabling requirements	*Purchased separately* Modem or asynchronous terminal adapter cables with a 25-pin, male D-shell connector to connect the 8235 to the modem; an IBM Token-Ring Network PC Adapter Cable (P/N 6339098) to connect the 8235 Model 051 to the Token-Ring network; an STP cable with RJ-45 with BNCs to connect the 8235 Model 052 to a 10BASE2 Ethernet network; an STP drop cable with AUI connectors to connect the 8235 Model 052 to a 10BASE5, thick coaxial Ethernet network.
Remote clients	DIALs clients on OS/2, DOS, Windows 3.x platforms, SLIP, PPP, AppleTalk ARA 2.0 (Model 052), Windows 95 RAS client, Windows NT RAS client 3.5 and Telnet
DIALs security	• Passwords: IDs and encrypted passwords in the 8235 are date-timed and user-upgradable. • Call-back: Call-back can be to a specified number or a roaming number. • Third party: SecurID ready, Novell NetWare 3.0 Bindery Services, AssureNet Pathways Defender, Blockade Systems, RADIUS authentication and accounting. A number of third-party hardware devices (for example, AssureNet Pathways and SecurID) are supported.

*Note: The software and publications are also available on the Web at http://www.networking.ibm.com/nes/neshome.html.
Note: If you are upgrading from version 2.0 or earlier software, additional memory is required. If you plan to install an ISDN BRI mdule in your 8235, you must also upgrade the ROM on the unit.



Model 051



Model 052



IBM 8235 DIALs Server Models 051 and 052 at a glance, continued

Management	• 8235 Management Facility: The Management Facility is a Windows-based, graphical application that runs in a WIN-OS/2 window using the IP option or in Windows 3.x using the IP or IPX protocols. Compatible with other 8235 models. • Nways Campus Managers: Nways Management for Windows or Nways Campus Manager LAN. • SNMP: MIB II can be managed from an SNMP manager. BootP server support provided. • Telnet: Telnet command shell is supported.
Physical specifications	Width: 301.8 mm (11.9 in.) Depth: 254 mm (10 in.) Height: 43.7 mm (1.7 in.) Weight: 2 kg (4.4 lb)
Electrical requirements	Power: 40 W Line voltage: 90 to 264 V ac Frequency: 50 to 60 MHz
Environmental requirements	Operating temperature: 10° to 40°C (50° to 104°F) Storage temperature: 0° to 50°C (32° to 122° F) Relative humidity: 8% to 80% Maximum wet-bulb temperature: 27°C (80°F)
Warranty	1 year

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For more information

To find out more about the IBM 8235 DIALs Server and other high-performance IBM communications and networking products, contact your IBM representative or call IBM Direct at 1 800 IBM-CALL (1 800 426-2255). You can also access the IBM Networking Home Page at http://www.networking.ibm.com.

Copies of this and other related product specification sheets can be obtained from the IBM FAX Information Service by dialing 1 800 IBM-4-FAX (1 800 426-4329) in the U.S. or Canada or by dialing (415) 855-4329 outside the U.S. and Canada and requesting the following document numbers:

5953: *IBM 8235 Model I40 Dial-In Access to LANs Switch*

6210: *IBM 8235 Dial-In Access to LANs Server Software*

5697: *IBM 8235 Dial-In Access to LANs Server Models 031 and 032*

6218: *IBM 8235 Dial-In Access to LANs Server Models 021 and 022*

5952: *IBM 8235 Dial-In Access to LANs Server Models 051 and 052*

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