



# IBM Netfinity<sup>®</sup> Remote Access Solutions

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## Highlights

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### **Power to Drive Your Business**

The Options™ By IBM (OBI) PCI Digital Modem Remote Access Server (RAS) Adapters are intelligent peripherals that use an on-board IBM PowerPC RISC CPU and memory to locally execute all communications protocols. This approach offloads the host CPU from low level tasks, thus preserving capacity for other applications to run concurrently and to facilitate remote administration and management.

### **Simultaneous Processing of Both ISDN and V.90 Call Traffic**

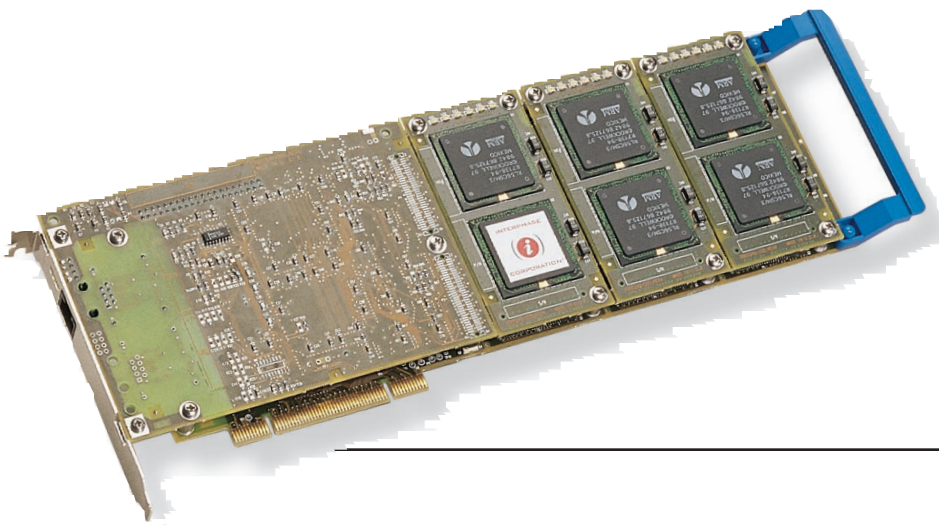
Both the OBI RAS Basic Rate Interface (BRI) and Primary Rate Interface (PRI) adapters are capable of simultaneously processing ISDN and analog (V.34 and V.90) call traffic. The BRI adapters are available with an S/T interface or with a built-in NT-1. The PRI adapters operate in short or long haul modes, and offer full FDL functionality. These adapters are perfect to support remote users requiring access to enterprise network applications like Microsoft Backoffice (SNA, SQL, E-mail), Remote Access Server, routing programs and communications programs

### **Outstanding Scalability**

Designed for scalability, each adapter comes equipped with one CPU mother-board, one WAN daughter card and up to three digital modem extension modules. In addition, the adapters are designed for ease of plug and play installation.

### **Remote Management**

In addition to the complete hardware kit, each OBI RAS adapter comes bundled with all the necessary software and drivers. This includes Remote Access Manager™ software from Virtual Motion. Remote Access Manager provides a comprehensive set of resource management and access controls which companies can combine to define RAS different groups. Remote Access Manager also provides complete RAS usage accounting, reporting, and event logging – forming an integrated NT RAS management solution.



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### OBI PCI Digital Modem RAS Adapter Features

- "Smart Card" architecture
- 40-80 MIPS IBM PowerPC RISC CPU
- Either a 4-port BRI S/T or U-Loop Interface or a 2-port PRI T1/E1 Interface
- NDISWAN Miniport driver for Windows NT 4.0
- Serial driver supporting asynchronous communicators
- Up to three expansion modules with six digital modems on each module for easy scalability
- Simultaneous processing of both ISDN and analog (V.34 and V.90) call traffic
- Fax Group 3 support
- MVIP Interface for multiple card extensions
- In-dialing and out-dialing capabilities
- Low power consumption (17 watts; 10 watts in sleep mode)
- Full PCI 2.1 compliant

### Embedded Communications Features

- ISDN Signaling Protocols (Q.921, Q.931)
- Support for MS NT 4.0 RAS
- COM port emulation for asynchronous communications
- Central Site V.90 modems
- Modem port expansion in increments of 6 ports: 12, 18, 24, 30
- Downloadable modem controller firmware and data pump code
- Advanced RISC Machines (ARM) architecture
- Data modes:
  - Modem (PSTN): ITU-T V.90, K56flex, V.34 (33.6 kbps), V.FC, V.32 bis, V.32, V.22 bis, V.22A/B, V.23, and V.21; Bell 212A and 103
  - ISDN: 64/56 kbps ISDN B-Channel HDLC control or data pass-through mode
- Channel aggregation via multi-link PPP
- Async/sync PPP conversion
- Synchronous PPP processing
- Internal error correction and data compression (ECC)
  - V.42 LAPM, MNP 2-4, and MNP 10 error correction
  - V.42 bis and MNP 5 data compression
- V.110, V.120 rate adaptation
- Low-power sleep mode with quick wake
- Dynamic time slot assignment to any available modem port
- Multi-frequency tone support for legacy network equipment (R1 and R2)
- Fax modem send and receive rates up to 14400 bps
  - V.17, V.33, V.29, V.27 ter, and V.21 Channel-2
  - Group 3, T.30 protocol and Class 1, 2 supported
- Communications software-compatible AT command set

### Virtual Motion Remote Access Manager Software Features

- Port Access Control – Access Control Lists (ACLs) grants specific users or user groups access to a given port
- RAS Login Control – Disables the ability of remote users to log-in using the same NT user account name
- Port Session Control – Specifies the maximum idle and connect time for any one RAS session
- Port Resource Management – Limits the total amount of connect time any user or user group can have
- IP Address Assignment – Assigns users a static IP address
- Usage Accounting – Generates usage account records
- NT RAS Event Logging Reporting – Provides server and port utilization bar graphs, and usage summary reports

Visit the Options Web site at  
[www.ibm.com/pc/us/accessories](http://www.ibm.com/pc/us/accessories)

#### Need more information?

#### IBM Reseller and general information

United States 1 800 426-9735  
Canada 1 800 465-7999

**IBM Fax Information Service** United States/Canada  
1 800 IBM-3395

**WorldWideWeb** [www.pc.ibm.com](http://www.pc.ibm.com)

**IBM Tech Support** 1 800 426-7378



### OBI RAS Adapter Options:

**33L4643** – A single slot PCI adapter providing four-port ISDN BRI connectivity with built-in NT-1 interfaces for eight ISDN B-channels and eight V.90 digital modems (For use in N. America)

**33L4644** – A single slot PCI adapter providing four-port ISDN BRI connectivity with S/T interfaces for eight ISDN B-channels and eight V.90 digital modems (For use in Europe)

**33L4645** – A single slot PCI adapter providing two-port PRI connectivity for 48 ISDN B-Channels and 24 embedded digital V.90 modems (For use in N. America)

**33L4646** – A single slot PCI adapter providing two-port PRI connectivity for up to 60 ISDN B-Channels and 12 embedded digital V.90 modems (For use in Europe)

**33L4647** – An expansion module for the 33L4645 and the 33L4646 digital modem adapters. Each expansion module contains six additional digital modems, to make the adapters easily scaleable for growing enterprises (For use in N. America/Europe)

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