

# IBM NetMEDIA Storage Expansion Unit EL

User's Guide Revision 1.2

Options by IBM

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## **IBM NetMEDIA**

## **Packaging Materials**

The IBM NetMEDIA storage expansion unit is shipped in a container designed to provide protection and prevent damage during shipment. This product was carefully inspected before and during the packing procedure at the factory. Evidence of any damage should be reported to the shipper immediately.

Before removing any component from its packaging, discharge any static electricity by touching a properly grounded metal object.

## **Package Contents**

Items	Quantity
IBM NetMEDIA Storage Chassis	1
Drive Rails	8
A/C Power Cables	2
M3 Screws	16
M3.5 Screws	8
M6 Screws	10
#6-32 Screws	16
Rack Mounting Nuts	10
Rubber Feet	4
User's Guide	1

If any items are missing or damaged, contact your IBM reseller or IBM marketing representative.

### Serial Number

The NetMEDIA is labeled with a serial number. Locate the serial number and record the number in the space provided below. This information can be helpful if you ever need to have this product serviced. Please see "Appendix A: Help and Service Information" for further details.

### **IBM NetMEDIA Serial Number**

## **General Description**

The IBM NetMEDIA is a rack mount external expansion chassis designed to support the IBM line of SCSI tape drives. NetMEDIA provides rugged and reliable housing for 3.5" or 5.25" form factor, full-height and/ or half-height 8-bit or 16-bit SCSI devices. NetMEDIA features two (2) 5.25" full-height bays, housing any combination of up to four (4) half-height or two (2) full-height tape drives and is designed to fit into a Netfinity NetBAY3 Stackable Enclosure or the Netfinity Rack Cabinet, or an equivalent EIA standard 19" rack.

Each NetMEDIA chassis is constructed of rugged steel and is equipped with two (2) independent power supplies, and two (2) high speed cooling fans. Internally, the NetMEDIA is wired for four (4) single-ended SCSI 3 (68-pin) drive connections. Standard configuration provides two external 68-pin VHDCI\* connectors (to support connection to one or two host SCSI adapters), and on-board termination.

The NetMEDIA chassis provides front, rear, and top access; the drives are easily accessible through the front, the fans and power supplies through the rear, and the internal SCSI I/O and DC power cables from the top.

This guide supplements documentation provided with the host computer system, the operating system, and the drive(s) to be installed within the NetMEDIA unit.

\* also referred to as 0.8mm VHDCI



Figure 1: NetMEDIA Storage Expansion Unit



Figure 2: NetMEDIA Drive Installation Overview

### **NetMEDIA Front Panel**

(See Figure 3)

**Chassis Power-On LEDs**- Provide a visual indication of the power condition (i.e. power on or off) for each power supply.

**Removable Filler Panels**-Accommodate up to four (4) half-height or two (2) full-height drive devices.

Removable Front Bezel- Snaps off for easy front access to drives.



Figure 3: NetMEDIA Front Panel

### **NetMEDIA Rear Panel**

(see Figure 4)

SCSI I/O Connector- The NetMEDIA is equipped with two (2) 68-pin VHDCI I/O connectors.

**Cooling Fans**- Two (2) back panel cooling fans provide ample chassis ventilation. Each 92mm fan provides 57 CFM of airflow.

**Service Tray Handle-** Provides a sturdy grip for tray removal and easy rear access to the cooling fans and power supplies

**A/C Power In**- Two (2) power inputs are provided to accommodate the two (2) independent power supplies. Accepts U.S. and other available international standard power cables.

**Power-On Switches-** Two (2) rocker switches control power to the two (2) individual 65 watt power supplies within the NetMEDIA chassis.

### **Turning the Power On/Off**

**Note:** There is a sequence to turning on and turning off the power units. Make sure you power-off and power-on the chassis in the sequence below.

#### **Turning the Power Off**

- 1. Make sure all activity to the NetMEDIA chassis has stopped. If applicable, logically disconnect from the host expansion unit.
- 2. Looking at the **front** of the chassis, turn off the right power switch first, then turn off the left power switch.

#### **Turning the Power On**

- 1. Verify that all communication and power cables are plugged into the back of the NetMEDIA chassis.
- 2. Looking at the **front** of the chassis, turn on the left power switch, then turn on the right power switch.



Figure 4: NetMEDIA Rear Panel

# NetMEDIA INSTALLATION

## Installing Drive(s) Into the NetMEDIA Chassis

While performing the steps in this section, work on a soft surface to prevent excessive shock to the drive(s) and to protect the finish of the chassis. The physical process of installing drive(s) into the NetMEDIA will involve removing the front bezel and filler panel(s), connecting the power and I/O cables to the drive(s), and reinstalling any filler panels (if needed) and front bezel. A #2 Phillips and flat head screwdriver will be required.

## **Removing the Front Bezel**

- **CAUTION:** Remove ALL power from the NetMEDIA chassis before working on the unit. This product contains NO USER SERVICEABLE PARTS inside.
  - 1. Unpack the NetMEDIA unit, or if already installed in a rack cabinet or enclosure, verify that all power and I/O cables have been disconnected. (Drives can be accessed without prior removal of the chassis from the rack cabinet, if applicable).
  - 2. If uninstalled, place the unit on a soft, clean surface in a well-lit area with sufficient working space around the chassis.
  - 3. Using the recessed handles, remove the front bezel by carefully pulling it straight off of the NetMEDIA chassis (Figure 5).
  - 4. To reinstall the front bezel, carefully snap it back onto the chassis.



Figure 5: NetMEDIA Front Bezel Removal

### Removing the Filler Panel(s)

- 1. Unscrew the two (2) M3.5 screws which secure the filler panel(s) to the chassis (Figure 6). Remove the filler panel(s).
- 2. To reinstall (if drive bay is left empty), secure the filler panel(s) back onto the chassis using the same M3.5 screws.



Figure 6: NetMEDIA Filler Panel Removal

## **Drive Preparation**

- 1. Remove the drive from its protective packaging.
- 2. SCSI Drive Termination- All devices installed will be on the same physical SCSI channel. Termination will be provided by a terminator included with the supplied internal I/O cable.
- 3. SCSI ID Selection- ID selection is made on the drive via jumper settings. (Refer to the drive manufacturer's documentation for specific jumper options).
- 4. Drive Rails- Attach the drive rails to each side of the drive with the four (4) screws provided; screw size (either M3 or #6-32) will depend on specific drive (Figures 7 and 8). Drive mount-ing holes vary with each manufacturer. (Refer to the drive manufacturer's documentation for specific drive information).



Figure 7: Attaching the Drive Rails to a Typical Full-Height 5.25" Drive



Figure 8: Attaching the Drive Rails to a Typical Half-Height 3.5" Drive

5. Connect the 4-pin DC power cable to the power connector located on the rear of the device, and the I/O cable to the drive (Figure 9). Verify that the PIN 1 indicator (indicated by a red stripe) on the I/O cable is properly aligned. (Refer to the drive manufacturer's documentation for specific drive formation). The length of these cables should allow easy access to each drive from the front of the NetMEDIA chassis.



Figure 9: Connecting the DC Power Cables and I/O Cables to the Drives

## Connecting the NetMEDIA Chassis to the Host(s)

**Caution:** Remove ALL power from the NetMEDIA chassis before working on the unit. This product contains NO USER SERVICEABLE PARTS inside.

The NetMedia chassis can be configured for either a single or dual-host connection. Up to two (2) drives can be connected to each host.

**Note:** For either single or dual-host configurations, make sure the installed drive(s) are connected to the appropriate internal I/O cable(s) for their intended hosts. Refer to Figure 10 below.



Figure 10: Typical Host Connection to the NetMedia

## **Top Service Panel**

Caution: Remove ALL power from the NetMEDIA chassis before working on the unit.

- **Note:** If the NetMEDIA chassis is not installed into the rack, the top service panel can be removed for easier access to the cables and/or drive installation.
  - 1. Unscrew the six (6) M3.5 screws that secure the top panel to the NetMEDIA chassis and remove the top panel (Figure 10).
  - 2. With the top panel removed, both DC power and internal SCSI I/O cables can be accessed through the top of the chassis. For shipping purposes, the SCSI I/O cable is conveniently folded and secured within the IBM NetMEDIA chassis to prevent excessive shifting during transport. (To release cable for installation, refer to the "Internal SCSI I/O Cable Clamp" section on the next page.)
  - 3. To reinstall, secure the top panel back onto the chassis using the same six (6) M3.5 screws.



Figure 11: Top Service Panel

## Internal SCSI I/O Cable Clamp

**Note:** For shipping purposes, the SCSI I/O cable is conveniently folded and secured within the IBM NetMEDIA chassis to prevent excessive shifting during transport.

To release cable for installation, refer to Figure 11 below.



Figure 12: Internal SCSI I/O Cable Clamp

## **Drive Installation**

- 1. After the drive rails are attached and the DC power cable(s) and I/O cable(s) are connected, slide the drive(s) into the NetMEDIA chassis. Be careful not to pinch or crimp the attached cables.
- 2. Fasten the drive to the chassis with the two (2) M3.5 screws provided (Figure 12). Do not tighten screws at this point. Before tightening the screws, verify that the drive(s) are flush with the front bezel. Adjust if necessary, and tighten screws.
- 3. Reinstall any filler panels, if necessary (for any empty bays).
- 4. Reinstall the front bezel.



Figure 13: Installing a Typical Full-Height 5.25" Drive into the NetMEDIA

## Installing the NetMEDIA into a Rack Cabinet

**Note:** The NetMEDIA chassis does not have to be mounted in a rack cabinet; it may be converted for desktop use instead (Refer to "NetMEDIA Chassis Desktop Conversion" for further information).

## **Rail Installation**

- 1. Choose a location within the rack cabinet to install the rails and mount the NetMEDIA chassis.
- 2. Loosen the eight (8) rail adjustment screws on both rails and adjust to fit the rack.
- 3. Make sure both rails are parallel to one another and level in the rack cabinet. Secure the rails to the rack cabinet using the eight (8) M6 screws and eight (8) rack mounting nuts provided (Figure 13).
- 4. Once both rails are secured in place, tighten the eight (8) rail adjustment screws.

### **Note:** NetMEDIA U-Height = 2.89U (1U = 1.75 inches = 44.45mm)



Figure 14: Installing the Rails

## Securing the NetMEDIA to the Rails

- 1. Once the rails are secured to the rack cabinet, the NetMEDIA chassis is ready for installation. Carefully slide the chassis onto the rails.
- 2. Secure the NetMEDIA chassis with two (2) M6 screws and two (2) rack mounting nuts provided (Figure 14).
- 3. Connect the A/C power supply cable(s).
- 4. Connect the appropriate host computer I/O cable to the NetMEDIA chassis.



Figure 15: Installing and Securing the NetMEDIA to the Rails

## **NetMEDIA Chassis Desktop Conversion**

- **Caution:** Remove ALL power from the NetMEDIA chassis before working on the unit. This product contains NO USER SERVICEABLE PARTS inside.
  - 1. Unpack the NetMEDIA and place the unit on a soft, clean surface in a well-lit area with sufficient working space around the chassis.
  - Unscrew the eight (8) #6-32 screws that secure the two (2) mounting flanges to the NetMEDIA chassis and remove flanges (Figure 15). Be sure to save the flanges and screws for future use.
  - 3. Turn over the NetMEDIA chassis so that the bottom of the unit is facing upwards. Peel the adhesive backing off the four (4) rubber feet provided and apply the feet to the underside of the chassis. Use the four (4) holes on the underside of the chassis as guides when mount-ing the feet (Figure 15).



Figure 16: NetMEDIA Chassis Desktop Conversion

## NetMEDIA Service Tray Removal

The NetMEDIA service tray contains two (2) power supplies and two (2) fans.

- **Caution:** Remove ALL power from the NetMEDIA chassis before working on the unit. This product contains NO USER SERVICEABLE PARTS inside.
  - 1. Unpack the NetMEDIA, or if already installed in a rack cabinet enclosure, unplug it and verify that all power and I/O cables have been disconnected.
  - 2. If uninstalled, place the unit on a soft, clean surface in a well-lit area with sufficient working space around the chassis. If installed within a rack, make sure there is enough space to remove the service tray from the chassis.
  - 3. Remove the five (5) M6 screws that secure the service tray to the NetMEDIA chassis (Figure 16).



Figure 17: Service Tray Screw Location and Removal

4. Using the service tray handle, carefully pull out the service tray from the NetMEDIA chassis (Figure 17).



Figure 18: Service Tray Removal

5. To reinstall, carefully slide the service tray back into the NetMEDIA chassis and secure, using the same five (5) screws.

# **APPENDICES**

# Appendix A: Help and Service Information

If you have questions about your new Options by IBM product, or require technical assistance, visit the IBM Personal Computing Support Web site at http://www.pc.ibm.com/support. For information about IBM, IBM PC products, or Options by IBM, visit the IBM Personal Computing Website at http://www.pc.ibm.com. Additionally, you can receive information from the IBM Automated Fax system at 1-800-426-3395 (in Canada, 1-800-465-3299), or from the Personal Systems Group Bulletin Board System (PSG BBS) at 1-919-517-0001. You can also get help and information through the IBM PC HelpCenter, 24 hours a day, seven days a week. Response time may vary, depending on the number and nature of the calls received.

Marketing, installation, and configuration support through the HelpCenter will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

## Step 1. Problem Solving

You may be able to solve the problem yourself. Before calling the HelpCenter, please prepare for the call by following these steps:

I. If you are having installation or configuration problems, refer to the detailed sections on installation found in this manual.

2. Visit the Personal Computing Support Web site specific to the model of option you have purchased. Updated installation instructions, hints and tips, or updated system-specific notes are often published in this section. You might find that later device drivers are available that will improve the performance and compatibility for your new option.

If you are installing this option in an IBM computer, also visit the applicable support Web page for that computer model. These pages might also contain useful hints and tips related to installation of this option and might refer to BIOS or device-driver updates required for your computer model. If you are instaling the option in a non-IBM computer, refer to the manufacturer's Web site.

3. Uninstall and then reinstall the option. During the uninstallation process, be sure to remove any files that were installed during the previous installation. Many IBM options include uninstallation programs.

4. Check all cabling to be sure that it is correct as shown in this manual. When you connect a cable to a cable connector, pay close attention to the colored stripes along the edge of the cable, and ensure that they are matched with PIN 1 on both the computer connector and the option connector.

5. If your option contains jumpers or switches, be sure their positions and orientation match the instructions in this manual.

## Step 2: Preparing for the Call

To assist the technical support representative, have available as much of the following information as possible:

- 1. Option name
- 2. Option number
- 3. Proof of purchase
- 4. Computer manufacturer, model, serial number (if IBM), and manual
- 5. Exact wording of the error message (if any)
- 6. Description of the problem
- 7. Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

## Step 3: Placing the Call to IBM

If you call 90 days or more after the date of withdrawal or after your warranty has expired, you might be charged a fee.

For the support telephone number and support hours by country, refer to the following table or to the enclosed technical support insert. If the number is not provided, contact your IBM reseller or IBM marketing representative.

#### Support 24 hours a day, 7 days a week

Canada	1-800-565-3344
U.S.A. / Puerto Rico	1-800-772-2227

### Additional Technical Support Resources

On-line technical support is available during the life of your product. On-line assistance can be obtained through the Personal Computing Support Web site, the PSG Electronic Bulletin Board System, and the IBM Automated Fax System.

#### **On-line Technical Support**

IBM Personal Computing Support Web Site	http://www.pc.ibm.com/support
IBM PSG BBS	1-919-517-0001
IBM Automated Fax System	1-800-426-3395
	1-800-465-3299 (in Canada)

# **Appendix B: Warranties and Notices**

The following warranty information applies to products purchased in the United States, Canada, and Puerto Rico. For warranty terms and conditions for products purchased in other countries, see the enclosed Warranty insert, or contact your IBM reseller or IBM marketing representative.

International Business Machines Corporation Armonk, New York, 10504

### **Statement of Limited Warranty**

The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you originally purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. If you have any questions, contact IBM or your reseller.

Machine:	IBM NetMEDIA
Warranty Period:	3 years

\*Contact your place of purchase for warranty service information.

#### **Production Status**

Each Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's warranty terms apply.

### The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if authorized by IBM, will provide warranty service under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

For IBM or your reseller to provide warranty service for a feature, conversion, or upgrade, IBM or your reseller may require that the Machine on which it is installed be 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many of these transactions involve the removal of parts and their return to IBM. You represent that all removed parts are genuine and unaltered. A part that replaces a removed part will assume the warranty service status of the replaced part.

If a machine does not function as warranted during the warranty period, IBM or your reseller will repair it or replace it with one that is at least functionally equivalent without charge. The replacement may not be new, but will be in good working order. If IBM or your reseller is unable to repair or replace the Machine, you may return it to your place of purchase and your money will be refunded. If you transfer a Machine to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this Statement to that user. However, for Machines which have a lifetime warranty, this warranty is not transferable.

#### **Warranty Service**

To obtain warranty service for the Machine, you should contact your reseller or call IBM. In the United States, call IBM at **1-800-772-2227**. In Canada, call IBM at **1-800-565-3344**. You may be required to present proof of purchase.

IBM or your reseller will provide certain types of repair and exchange service, either at your location or at IBM's or your reseller's service center, to restore a Machine to good working order. Types of service may vary from country to country. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation.

When a type of service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service. You also agree to ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange.

You agree to:

- 1. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
- 2. where applicable, before service is provided
  - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provide,
  - b. secure all programs, data, and funds contained in a Machine, and
  - c. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

#### **Extent of Warranty**

IBM does not warrant uninterrupted or error-free operation of a Machine.

The warranties may be voided by misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, removal or alteration of Machine or parts identification labels, or failure caused by a product for which IBM is not responsible.

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Circumstances may arise where, because of a default on IBM's part or other liability you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM is liable only for:

- 1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
- 2. the amount of any other actual direct damages or loss, up to the greater of U.S. \$100,000 or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

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Netfinity NetBAY Netfinity Rack NetMEDIA

# **Appendix C: Electronic Emission Notices**

### Federal Communications Commission (FCC) Statement

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet the FCC emissions limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications to this equipment may cause interference which could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Industry Canada Class A Emission Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

### Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conform à la norme NMB-003 du Canada.

### European Union (EU) Mark of Conformity Statement

This product is in conformity with the protection requirements of EU Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including fitting of non-IBM option cards.

Properly shielded and grounded cables and connectors must be used in order to reduce the potential for causing interference to radio and TV communications and to other electrical or electronic equipment. IBM cannot accept responsibility for any interference caused by using other than recommended cables and connectors.

**Warning:** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### Zulassungsbescheinigung laut dem Deutschen Gestetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) vom 30. August 1995 (bzw. der EMC EG Richlinie 89/336).

Dieses Gerät ist berechtigt in übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen-CE-zu führen.

Verantwortlich für die Konformitätserklärung nach Paragraph 5 des EMVG ist die IBM Deutschland Informationssytsteme GmbH, 70548 Stuttgart.

Informationen in Hinsicht EMVG Paragraph 3 Abs. (2) 2:

EN55022 Klasse A Geräte müssen mit folgendem Warnhinweis versehen werden:

"Warnung: dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen."

EN 50082-1 Hinweis:

"Wird dieses Gerät in einer industriellen Umgebung betrieben (wie in EN 50082-2 festgelegt), dann kann es dabei eventuell gestört werden. In solch einem Fall ist der Abstand bzw. die Abschirmung zu der industriellen Störquelle zu vergrößern."

Anmerkung:

Um die Einhaltung des EMVG sicherzustellen sind die Geräte, wie in den IBM Handbüchern angegeben, au installieren und zu betreiben.

### Japanese Voluntary Control Council for Interference (VCCI) Statement

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbances may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に 基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を 引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求 されることがあります。

### **Korean Communications Statement**

Please note that this device has been certified for business purposes with regard to electromagnetic interference. If you find this is not suitable for your use, you may exchange it for one of residential use.

### **CISPR22** Compliance Statement

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to CISPR22/European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

**Warning:** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

# Appendix D: Specifications/Dimensions

IBM NetMEDIA	Actual Weight
Chassis	26.5lbs (12kg)
Chassis (w/ Rails)	31.8lbs (14.5kg)

Environmental Specifications		
	Operating	Storage
Ambient Temperature	-5° C to 50° C	-45° C to 75° C
Relative Humidity <sup>(1)</sup>	10% to 80%	10% to 90%
Altitude	-1000 to 50,000 ft	-1000 to 50,000 ft
	-304m to 15240m	-304m to 15240m
Shock (2)	10g	60g

<sup>(1)</sup>Non-condensing with maximum Gradient of 10% per hour

<sup>(2)</sup>11 msec Pulse Width 1/2 Sine Wave

Physical Specification	ns
Height	5.05" (128.27mm = 2.89U)
Width	19.00" (482.60mm) <sup>(1)</sup>
Depth	19.76" (501.90mm) <sup>(2)</sup>
Depth	19.76" (501.90mm) <sup>(2)</sup>

<sup>(1)</sup> Includes mounting flanges

<sup>(2)</sup> Includes front bezel

Electrical Specifications		
(2) Auto Ranging 65 Watt (112W Peak) Power Supplies		
AC Input (each)	100VAC - 250VAC at 4A-2A, 47-60Hz	
DC Output Continuous (each)	5V at 5A, 12V at 3A	
DC Output Peak (each)	5V at 8A, 12V at 6A	

Chassis Reliability/Maintainability		
MTBF <sup>(1)</sup>	500,000 Hours	
MTTR <sup>(2)</sup>	5 Minutes	
Preventive Maintenance	None	

Fan Air Flow	
Total for 2 Fans	114 CFM

<sup>(1)</sup>MTBF = Mean Time Between Failure

<sup>(2)</sup>MTTR = Mean Time To Repair

(Specifications are for reference only)

### **IBM NetMEDIA Dimensions**



### Figure 19: Physical Dimensions

(Dimensions are for reference only)



Part Number: 28L2258



Printed in the United States of America on recycled paper containing 10% recovered post-consumer fiber