



# IBM UPS 7500XHV, UPS 10000XHV, UPS 3U Online Battery Pack, U320 SCSI Controller, Quick Install Filler Panels, 4 GB Memory Kit and 60 GB HDD

## Overview

Protect and substantially extend the backup power runtimes of your mission-critical, high power density applications with cost-effective, high-density, uninterruptible power supply (UPS) options.

The new IBM UPS 7500XHV, IBM UPS 10000XHV, and IBM 3U Extend Run Battery Pack offering feature:

- A suite of easy-to-use management tools
- Extremely high quality true online power protection
- Rack-mounting or stand-alone-tower installations
- Rack space-saving qualities
- Extended battery run times with additional battery packs

The new UPS products take leadership with high-availability features and functions:

- Online topology means higher grade power protection than typical line interactive UPS products
- Ability to hot swap battery packs
- UPS can accept either single-phase or three-phase inputs for the maximum flexibility during installation
- UPS provides four C20 outlets with a 15A circuit breaker protecting each
- Extend run battery pack options increase backup power runtimes to 90 minutes
- Standard serial, USB, network communications, and environmental management
- Support for unattended shut down of individual systems using network connection
- Ability to remotely control power so critical servers can run for a longer period of time
- Highly efficient power factor of .80
- Three-year limited warranty<sup>1</sup>

**IBM Ultra320 SCSI Controller 2 (13N2249):** This controller ships with a low-profile bracket for 2U servers.

**IBM Quick Install Filler Panels (25R5559/25R5560):** Allow you to install filler panels in empty "U" spaces without tools. The innovative panels snap into place and are held by a steel spring mechanism. Offered in 1U and 3U sets, each includes five individual panels.

**IBM 4 GB (2 x 2 GB kit) PC2-3200 CL3 Single Rank ECC DDR2 SDRAM RDIMM (73P4792):** Unleashes the full power of the Intel Processor with its 800 MHz Front Side Bus by matching the processor FSB bandwidth of 6.4 GBs with an equal, balanced 6.4 GBs of memory bandwidth.

**BladeCenter™ 60 GB IDE 5400 rpm HDD Option (25R6904):** 60 GB of online storage for applications and data.

**LifeKeeper mySAP/Oracle Solution on Linux (24R9458):** Maintains high levels of availability of applications by monitoring system and application health, maintaining client connectivity, and providing excellent ongoing data access

## Key prerequisites

The UPS 7500XHV and UPS 10000XHV are ideal for environments where high-availability servers and components require backup power to sustain business activity. The following customer-supplied wall outlets and line cords are required:

- UPS 7500XHV — 200 V to 240 V, 38 A circuit (single phase), or 380 V to 415 V, 18 A circuit (three phase)
- UPS 10000XHV — 200 V to 240 V, 50 A circuit (single phase) or 380 V to 415 V, 14 A circuit (three phase)

## At a glance

Cost-effective, extended run-time power backup to IBM *@server* xSeries® servers, plus more efficient use of space.

- Up to 10,000 Volt Amps (VA) and 8,000-watt load capacity (product dependent)
- 6 U rack-mountable or stand-alone tower
- USB, serial, and network communications standard — Lets you manage and control your power in a variety of methods
- UPS management software integrates with IBM Director to deliver seamless systems management
- Hot swap battery pack
- Optional runtime battery packs increase run time under full load for up to 90 minutes

## IBM Ultra320 SCSI Controller 2

- Supports Ultra160, Ultra2 SCSI, Ultra SCSI and Ultra320
- Ideal for workstations and Intel-based servers
- Data transfer rate up to 320Mbps/channel

## Planned availability dates

- November 30, 2004, IBM 60 GB IDE HDD
- December 1, 2004, IBM Quick Install Filler Panels
- December 3, 2004, IBM 4 GB (2 x 2 GB kit) PC2-3200 CL3 Single Rank ECC DDR2 SDRAM RDIMM
- December 10, 2004, IBM Ultra SCSI Controller
- January 20, 2005, IBM UPS 7500XHV, UPS 10000XHV, UPS 3U Battery Pack

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: <http://www.ibm.com>.

---

## Description

---

Both the UPS units are 6U. They are built on similar configurations that deliver the highest wattage available in an IBM UPS. This means you can power larger, more power-intensive solutions simpler than before.

### **UPS 7500XHV and UPS 10000XHV with UPS 3U Extend Run Battery**

The UPS 7500XHV, UPS 10000XHV includes all the components necessary to set up and support rack servers.

#### **Standard UPS 7500XHV, UPS 10000XHV configurations**

<b>Model</b>	<b>Mechanical</b>
2130-6RX	UPS 7500XHV
2130-8RX	UPS 10000XHV

### **UPS 7500XHV and UPS 10000XHV**

Internal battery pack

- Typical backup time at half load:
  - 19 minutes for UPS 7500XHV
  - 13 minutes for UPS 10000XHV
- Battery type: Maintenance-free sealed lead-acid battery
- Typical recharge time: less than three hours for 90% of internal battery
- Battery charger: Temperature compensated; current limited; float charger; 800-watt

### **Communications and management**

- Interface port: DB-9 RS-232, and built-in 10 baseT and 100 BaseT-Ethernet interface
- Management software included:
  - PowerChute Business Edition
  - PowerChute Network Shutdown
- Control panel: LED status display with load and battery bar-graphs and Online; On Battery; Replace Battery, Internal fault, Internal Bypass, and Overload indicators.
- Audible alarm: Alarm when on battery; distinctive low battery alarm; configurable delays.
- Emergency Power Off (EPO): There is a terminal provided on the UPS where a separate external EPO switch can be connected.

### **IBM Ultra320 SCSI Controller 2 (13N2249)**

The Ultra320 controller is simple to install and run, it is perfect solution for workstations and Intel-based servers needing U320 SCSI. The Ultra320 controller features:

- Support for up to 15 drives
- Half-size single channel U320 SCSI adapter with legacy SCSI connector
- 64-bit 133 MHz PCI-X
- One internal U320 68-pin connector
- One 68-pin external VHDCI connector

- Supports U160, U320, Ultra and Ultra2 SCSI
- Supported by Windows™ and Linux™ operating systems
- One-year limited warranty

### **IBM 4 GB (2 x 2 GB kit) PC2-3200 CL3 Single Rank ECC DDR2 SDRAM RDIMM (73P4792)**

The new 4 GB DDR2 memory kit unleashes the full power of the Intel processor with its 800 MHz Front Side Bus by matching the processor FSB bandwidth of 6.4 GBs with and equal, balanced 6.4 GBs of memory bandwidth. In combination with the CPU and chipset, system memory is one of the key contributors to overall system performance. Because the CPU uses system memory for temporary storage of application instructions and computation results, having a fast access to 4 GB of system memory by the CPU will have a positive impact on the system application performance and improves the overall responsiveness of the xSeries server, or workstation.

DDR2 400 MHz memory is the highest performing memory architecture available in the Intel server market today. In addition, these new memory modules consume less standby power and operating power than earlier SDRAM modules. All of these technology advances result in a balanced xSeries system platform that is 4 GB memory kit is optimized for memory demanding applications, such as, server consolidation, collaboration, database, eCommerce, business intelligence and customer relationship marketing applications.

This new Single Rank based memory kit will allow the x336 and x346 to achieve a maximum memory of 16 GB to service the large memory requirements of these memory-hungry applications.

DDR2 Memory key performance benefits:

- Higher peak bandwidth / transfer rates for increased performance 20% higher peak bandwidth than DDR
- Up to four DIMMs per channel compared to three DIMMs with DDR 25% improvement over DDR

DDR2 technology assists in creating the following technology advances:

- Smaller size modules
- Higher reliability
- Better signal quality
- Higher memory performance

### **IBM BladeCenter 60 GB 5400 rpm ATA-100 IDE Drive**

The new 25R6904 BladeCenter drive option provides 60 GB of online storage for applications and data. Up to two drive options can be installed on a single blade server module.

Customers can configure these drives as individual drives to double the online storage or they can configure them in a RAID 1 configuration for maximum data protection. Being attached to blade server module, these drives provide online storage without the need to add external storage devices, freeing up rack space for other equipment.

These drives are a cost effective and rack-space efficient solution to your blade server storage needs.

---

## Product positioning

---

In the xSeries line of UPS offerings, the UPS 7500XHV and 10000XHV add a higher level of power support than previously available from IBM.

These products do not replace any current offerings but will reduce usage of the APC UPS5000 since these new offerings have much higher watt per U space, higher quality power conditioning, and more management options.

These two UPS products join the currently available IBM UPS3000X, a high availability UPS that occupies 2U of rack space.

### ***IBM Ultra320 SCSI Controller 2***

This SCSI controller is simple to install and run. It is perfect for non-hotswap HDDs and external tape units.

### ***IBM 4 GB (2 x 2 GB kit) PC2-3200 CL3 Single Rank ECC DDR2 SDRAM RDIMM Memory***

DDR2 400 MHz memory is the highest performing memory architecture available in the Intel server market today. In addition, these new memory modules consume less standby power and operating power than earlier SDRAM modules.

---

## Reference information

---

<sup>1</sup> For information on the IBM Statement of Limited Warranty, visit [http://www.ibm.com/servers/support/machine\\_warranties/](http://www.ibm.com/servers/support/machine_warranties/)

Alternatively, this information is available through your IBM representative or reseller. Copies are available upon request.

On-site applies to UPS 7500XHV and UPS 10000XHV. With respect to on-site service, IBM sends a technician after attempting to diagnose and resolve the problem remotely.

### ***Trademarks***

BladeCenter is a trademark of International Business Machines Corporation in the United States or other countries or both.

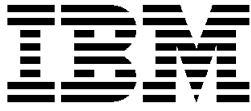
The e-business logo and xSeries are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Intel is a trademark of Intel Corporation.

Windows is a trademark of Microsoft Corporation.

Linux is a trademark of Linus Torvalds in the United States, other countries or both

Other company, product, and service names may be trademarks or service marks of others.



# IBM US Announcement Supplemental Information

November 9, 2004

---

## Publications

---

To assist you in configuring xSeries® servers with NetBAY racks and components, the following configurators are available:

- xSeries and IntelliStation® Sales Configuration Aid
- Configuration and Options Guide
- Rack Configurator

To obtain information and download these configurators, visit

<http://www.ibm.com/pc/us/eserver/xseries/library/configtools.html>

---

## Services

---

### *Integrated Technology Services*

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

These services help you learn about, plan, install, manage, or optimize your IT infrastructure for e-business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for IBM and many non-IBM offerings. IBM is your one-stop shop for IT support needs.

For details on available services, contact your IBM representative or visit

<http://www.ibm.com/services/>

For details on education offerings related to specific products, visit

<http://www.ibm.com/services/learning/index.html>

Select your country, and then select the product as the category.

---

## Technical information

---

### *Physical specifications*

#### *UPS 7500XHV, UPS 10000XHV dimensions*

- Approximate height: 260.0 mm (10.0 in)
- Approximate width: 430.0 mm (17.0 in)
- Approximate depth: 660.0 mm (26.0 in)
- Rack height: 6U
- Approximate weight: 111 kg (244 lbs)

#### *UPS 3U Extend Run Battery Pack*

### Dimensions

- Approximate height: 130 mm (5 in)
- Approximate width: 430 mm (17 in)
- Approximate depth: 700 mm (27.5 in)
- Rack height: 3U
- Approximate weight: 87 kg (190 lbs)

### Shipping dimensions

- Approximate height: 420 mm (16.3 in)
- Approximate width: 600 mm (24 in)
- Approximate depth: 1000 mm (39.4 in)
- Approximate weight: 100 kg (220 lb)

### Electrical

- 200 to 240 (nominal) V ac; 50 Hz or 60 Hz; single or 380 V to 415 V ac; 50 Hz or 60Hz; three phase
- UPS 7500XHV — 38 A (single phase), 14 A (three phase)
- UPS 10000XHV — 50 A (single phase), 18 A (three phase)
- Output through four C20 outlets, each protected with a 15A circuit breaker
- Audible noise at one meter — <55 dBa (100% load)
- Online thermal dissipation — 1,535 BTU/hr for 7.5kVA; 2,216 BTU/hr for 10kVA

**Hardware requirements:** The UPS 7500XHV and UPS 10000XHV must be installed in an Enterprise or S2 rack or an 19-inch EIA™-310-D industry-standard rack.

### Equipment approvals and safety

- FCC
- UL
- CSA
- NOM
- CE Mark
- VDE
- GOST
- BSMI Taiwan
- CB Report
- VCCI
- CISPR 22 Class A
- Standards:
  - EN 50091
  - EN 55022
  - EN 55024
  - EN61000-3-2:1995
  - EN61000-3-3:1995
  - EN61000-4-11:1994
  - EN61000-4-2:1995
  - EN61000-4-3:1998
  - EN61000-4-4:1995
  - EN61000-4-5:1995

*This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: <http://www.ibm.com>.*

- EN61000-4-6:1996
- EN61000-4-8:1994

### **Operating environment**

- Temperature: 0° to 40.0°C (32° to 104°F) at 0 to 3000 m (0 to 10,000 ft)
- Relative humidity: 0% to 95%
- Maximum altitude: 3,000 m (10,000 ft)

**Software requirements:** The UPS 7500XHV and UPS 10000XHV will provide backup power to your server regardless of what operating system is used. However, to enjoy the benefits and manageability features provided with PowerChute Business Edition and PowerChute Network Shutdown software, included with this UPS, one of the following operating systems must be used:

- Novell NetWare 6.5
- Microsoft™ Windows NT™ Server 4.0
- Microsoft Windows™ 2000 (Server, and Advanced Server)
- Microsoft Windows XP Professional Edition
- Microsoft Windows Server 2003 (Enterprise, Standard, and Web Edition)
- Red Hat Enterprise Linux™ AS, ES, and WS (v3 for x86)

### **Program requirements**

The UPS 7500XHV, UPS 10000XHV supports the operating systems of the xSeries server to which it is attached.

**Compatibility:** The PowerChute Business Edition software is compatible with IBM Director.

The UPS 7500XHV and UPS 10000XHV are compatible with all xSeries servers and IntelliStation workstations and other supporting devices that require AC power.

### **IBM Ultra320 SCSI Controller 2 functions in most xSeries servers and IntelliStation system**

**Limitations:** UPS 7500XHV, UPS 10000XHV requires 6 U of rack space in one of the following rack cabinets:

- IBM S2 42U rack
- IBM S2 25U rack
- IBM NetBAY42 Enterprise rack
- NetBAY11 Standard rack

**User group requirements:** This announcement satisfies or partially satisfies the requirements from one or more of the worldwide user group communities. Groups include COMMON, COMMON Europe, Guide Share Europe (GSE), InterAction (Australia/New Zealand), Japan Guide Share (JGS), and SHARE Inc.

### **Planning information**

**Customer responsibilities:** The UPS 7500XHV and UPS 10000XHV are designated as customer setup. Customer setup instructions are shipped with each system. The UPS must be installed in an Enterprise or S2 rack or an 19-inch, EIA-310-D industry-standard rack.

### **Rack installations**

UPS 7500XHV, UPS 10000XHV requires 6 U of rack space in one of the following rack cabinets:

- IBM S2 42U rack
- IBM S2 25U rack
- IBM NetBAY42 Enterprise rack
- NetBAY11 Standard rack

**Cable orders:** None

**Installability:** The UPS 7500XHV, UPS 10000XHV requires about 20 minutes for installation. Installation includes unpacking, attaching customer-provided line cord, setting up, and powering on the system.

**Packaging:** One box

### **System unit carton**

- Base UPS with Network Management card
- Two front bezels
- Rail set
- Rack-to-tower conversion kit
- Miscellaneous hardware kit
- Quick Installation Guide
- Documents CD
- PowerChute Business Edition CD
- Network Management Card CD
- Warranty Flyer
- Serial communication cable — 4.6 m (15 ft)
- Serial to USB adapter cable — 2 m (6.5 ft)
- Four output power cables — 2 m (6.5 ft)
- Serial to USB Adapter Drivers CD
- Shipping bracket

The UPS 7500XHV, UPS 10000XHV is shipped as a single package. Other items are in zipped bags.

### **Retail only**

#### **Packaging dimensions/weight**

- Single box (HxDxW):
  - 420.0 mm (16.3 in)
  - 1000.0 mm (39.4 in)
  - 600.0 mm (24.0 in)
- Package weight: 100 kg (220 lbs.)

### **Supplies**

**For end users:** IBM UPS 7500XHV, UPS 10000XHV can be purchased through dealers around the world.

### **Security, auditability, and control**

Security and auditability features include:

- Power-on and privileged access password functions control access to the data and server setup program on the server.

It is a customer's responsibility to ensure that the server is secure to prevent sensitive data from being removed.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

---

## Terms and conditions

---

This product is available for purchase under the terms of the IBM Customer Agreement (ICA).

Each IBM machine is manufactured from parts that may be new or used. In some cases, a machine may not be new and may have been previously installed.

Regardless, IBM's appropriate warranty terms apply.

### **IBM Global Financing:** Yes

To obtain copies of the IBM Statement of Limited Warranty, contact your reseller or IBM.

In the United States, call 800-IBM-SERV (426-7378), or write to:

Warranty Information  
P.O. Box 12195  
Research Triangle Park, NC 27709  
Attn: Dept JDJA/B203

### **Warranty period**

- System hardware — Three years
- Optional features — One year

Optional IBM features initially installed in an IBM system carry the same warranty period as the system. If installed after the initial system installation, they carry the balance of the system warranty or the optional feature warranty, whichever is greater.

**Warranty service:** If required, IBM provides repair or exchange service depending on the type of warranty service specified below for the machine. An IBM technician will attempt to resolve your problem over the telephone. You must follow IBM's problem determination and resolution procedures. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations. Additional charges may apply outside IBM's normal service area. Contact your local IBM representative or your reseller for country- and location-specific information.

Customer Replaceable Unit (CRU) (for example, keyboard, mouse, speaker, memory, HDD, and other easily replaceable parts) Service and On-site Repair (IOR) for other selected parts.

**CRU service:** IBM provides replacement CRUs to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from IBM at any time on your request. CRUs are designated as being either a Tier 1 or a Tier 2 CRU. Installation of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU, at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge under the type of warranty service specified below, On-site Service. Based upon availability, CRUs will be shipped for next business day delivery. IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, return instructions and a container are shipped with the replacement CRU, and you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of the replacement.

The following parts have been designated as Tier 1 CRUs:

UPS 7500XHV chassis	5R5589
UPS 10000XHV chassis	25R5590
UPS battery module	25R5591
Front bezel	25R5594
Battery bezel	25R5595
7500XHV Display bezel	25R5592
10000XHV Display bezel	25R5593
Tower kit	25R5597
Rail kit	73P5769
Serial to USB adapter	25R5596
Serial cable	73P5767
Misc parts kit	25R5600
Rack Jumper Power Cable (C19/C20)	00N7700
Network Management Card	25R5599
Battery Pack Chassis	25R5588

**On-site service:** IOR: nine hours per day, Monday through Friday excluding holidays, next business day response. IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well-lit, and suitable for the purpose. On-site service is not available in all countries, and some countries have kilometer or mileage limitations from an IBM service center. In those locations where on-site service is not available, the normal in-county service delivery is used.

Call IBM at 800-IBM-SERV (426-7378), to assist with problem isolation for hardware to determine if warranty service is required. Telephone support may be subject to additional charges, even during the limited warranty period.

**International Warranty Service (IWS):** IWS is available during the warranty period to customers who travel or relocate to countries where their computer is sold and serviced by IBM or IBM resellers authorized to perform warranty service. Eligible IBM computers are identified by their four-digit machine type.

You can obtain IWS through the method of service, such as CRU, depot, carry-in, or on-site, provided in the servicing country. Service methods and procedures vary by country, and some service or parts may not be available in all countries. Service centers in certain countries may not be able to service all models of a particular machine type. In addition, some countries may have fees and restrictions that apply at the time of service.

To determine the eligibility of your computer and to view a list of countries where service is available, visit:

<http://www-3.ibm.com/pc/support/site.wss/warranty/warranty.vm>

For more information on IWS, refer to Services Announcement 601-034, dated September 25, 2001.

**Licensing:** Programs included with this product are licensed under the terms and conditions of the License Agreements shipped with the system.

### **Maintenance services — ServiceElect and ServiceSuite™**

ServiceElect and ServiceSuite provide hardware warranty service upgrades, maintenance, and selected annuity support services in one agreement.

**Warranty service upgrade:** During the warranty period, warranty service upgrade provides an enhanced level of On-site Service for an additional charge. A warranty service upgrade must be purchased during the warranty period and is for a fixed term (duration). It is not refundable or transferable and may not be prorated. If required, IBM will provide the warranty service upgrade enhanced level of On-site Service acquired by the customer. Service levels are response time objectives and are not guaranteed.

An IBM technician will attempt to resolve your problem over the telephone. You must follow IBM's problem determination and resolution procedures. Scheduling of service will depend upon the time of your call and is subject to parts availability.

Customer Replaceable Units (CRUs) will be provided as part of the machine's standard warranty CRU Service except that you may install a Tier 1 CRU yourself or request IBM installation, at no additional charge, under one of the On-site Service levels specified below.

IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well-lit, and suitable for the purpose.

The following Warranty Service Upgrade options are available:

- On-site Service — IBM On-site Repair (IOR), 9 hours per day, Monday through Friday excluding holidays, 4-hour average response
- On-site Service — IBM On-site Repair (IOR), 24 hours per day, 7 days a week, 4-hour average response
- On-site Service — IBM On-site Repair (IOR), 24 hours per day, 7 days a week, 2-hour average response

**Maintenance service:** If required, IBM provides repair or exchange service depending on the type of maintenance service specified below for the machine. An IBM technician will attempt to resolve your problem over the telephone. You must follow IBM's problem determination and resolution procedures. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed.

**CRU service:** If your problem can be resolved with a CRU (for example, keyboard, mouse, speaker, memory, HDD, and other easily replaceable parts), IBM will ship these parts to you for replacement by you. CRU information and replacement instructions are shipped with your machine and are available from IBM at any time on your request. CRUs are designated as being either a Tier 1 or a Tier 2 CRU. When you acquire next business day response On-site Service, installation of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU, at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of service specified below, On-site Service. When you acquire 2 or 4 hour average response On-site Service, you may install both Tier 1 and Tier 2 CRUs yourself or request IBM to install it, at no additional charge. IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, return instructions and a container are shipped with the replacement CRU, and you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of the replacement.

**On-site service:** IBM On-site Repair (IOR), IBM will repair the failing Machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM Machine. The area must be clean, well-lit, and suitable for the purpose.

The following On-site Service options are available:

- IOR, nine hours per day, Monday through Friday excluding holidays, next-business-day response
- IOR, nine hours per day, Monday through Friday excluding holidays, 4-hour average response
- IOR, 24 hours per day, 7 days a week, 4-hour average response
- IOR, 24 hours per day, 7 days a week, 2-hour average response

### **Maintenance service (ICA)**

Maintenance services are available for ICA legacy contracts. The preferred go-to-market offerings are ServiceElect. However, ICA legacy contracts will still be available for current customers until they are withdrawn.

**Alternative service (Warranty service upgrades):** During the warranty period, warranty service upgrade provides an enhanced level of On-site Service for an additional charge. A warranty service upgrade must be purchased during the warranty period and is for a fixed term (duration). It is not refundable or transferable and may not be prorated. If required, IBM will provide the warranty service upgrade enhanced level of On-site Service acquired by the customer. Service levels are response time objectives and are not guaranteed.

An IBM technician will attempt to resolve your problem over the telephone. You must follow IBM's problem determination and resolution procedures. Scheduling of service will depend upon the time of your call and is subject to parts availability. If applicable, parts that are considered CRUs will be provided as part of the machine's standard warranty CRU Service.

IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well-lit, and suitable for the purpose.

The following Warranty Service Upgrade option is available.

- IOR, 24 hours per day, 7 days a week, 4-hour average response

**Maintenance service:** If required, IBM provides repair or exchange service depending on the type of maintenance service specified below for the machine. An IBM technician will attempt to resolve your problem over the telephone. You must follow IBM's problem determination and resolution procedures. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed.

**CRU service:** If your problem can be resolved with a Customer Replaceable Unit (CRU) (keyboard, mouse, speaker, memory, or HDD), IBM will ship the CRU to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from IBM at any time on your request. CRUs

are designated as being either a Tier 1 or a Tier 2 CRU. When you acquire next business day response On-site Service, installation of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU, at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of service specified below, On-site Service. When you acquire 2 or 4 hour average response On-site Service, you may install both Tier 1 and Tier 2 CRUs yourself or request IBM to install it, at no additional charge. IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, return instructions and a container are shipped with the replacement CRU, and you may be charged for the replacement CRU if IBM does not receive the defective CRU within 30 days of your receipt of the replacement.

**On-site service:** IBM On-site Repair (IOR), IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well-lit, and suitable for the purpose.

The following On-site Service options are available:

- On-site Service — IBM On-site Repair (IOR), 9 hours per day, Monday through Friday excluding holidays, next-business-day response
- IOR, 24 hours per day, 7 days a week, four-hour average response

**Non-IBM parts support**

**Warranty service:** IBM is now shipping machines with selected non-IBM parts that contain an IBM field replaceable unit (FRU) part number label. These parts are to be serviced during the IBM machine warranty period. IBM is covering the service on these selected non-IBM parts as an accommodation to their customers, and normal warranty service procedures for the IBM machine apply.

**Warranty service upgrades and maintenance services:** Under certain conditions, IBM Integrated Technology Services repairs selected non-IBM parts at no additional charge for machines that are covered under a warranty service upgrade or maintenance services.

IBM Service provides hardware problem determination on non-IBM parts (adapter cards, PCMCIA cards, disk drives, memory, and so forth) installed within IBM systems covered under warranty service upgrade or maintenance services and provides the labor to replace the failing parts at no additional charge. If IBM has Technical Service Agreements with the manufacturers of the failing part, or if the failing part is an accommodations part (a part with an IBM FRU label), IBM may also source and replace the failing parts at no additional charge. For all other non-IBM parts, customers are responsible for sourcing the parts. Installation labor is provided at no additional charge, if the machine is covered under a warranty service upgrade or maintenance services.

**IBM hourly service rate classification:** One

**ServicePac® offerings**

**Warranty and maintenance options:** The announced products may be eligible for ServicePacs for Warranty and Maintenance Options, convenient prepackaged offerings for warranty service upgrades and maintenance services.

**Installation services:** The announced products may be eligible for ServicePacs for Installation Services, convenient prepackaged offerings for installation services. Refer to the **Prices** section for information on the availability of ServicePac offerings.

For additional ServicePac information, visit:

<http://www-1.ibm.com/services/its/us/servicepac.html>

**Field-installable features:** Yes

**Model conversions:** No

**Machine installation:** Customer setup. Customers are responsible for installation according to the instructions IBM provides with the machine.

**Graduated charges:** No. These products do not contain licensed internal code or licensed machine code.

**Prices**

Description	Machine type/ model	Part number	IBM list price <sup>2</sup>
IBM UPS 7500XHV	2130-6RX	21306RX	\$4,399
IBM UPS 10000XHV	2130-8RX	21308RX	5,349
IBM UPS 3U Run Online Battery Pack		25R5582	1,199
IBM Ultra320 SCSI Controller 2		13N2249	329
IBM 1U Quick Install Filler Panel Set		25R5559	55
IBM 3U Quick Install Filler Panel Set		25R5560	75
IBM 4 GB (2 x 2 GB kit) PC2-3200 CL3 Single Rank ECC DDR2 SDRAM RDIMM		73P4792	7,999
BladeCenter™ 60 GB 5400 rpm ATA-100 IDE Drive		25R6904	349
LifeKeeper for mySAP/Oracle Solution on Linux		24R9458	5,399

<sup>2</sup> IBM list price does not include tax or shipping and is subject to change without notice. Reseller prices may vary.

To order direct, call IBM at 877-999-7115 and select option 4.

For of the name of the nearest IBM representative or Business Partner, call 800-IBM-4YOU (426-4968).

**ServicePac for warranty and maintenance**

Description	Part number
1-year MA 9 x 5 IOR next-business-day response	14R1700
1-year MA 9 x 5 x 4 IOR 4-hour average response	29R4962
1-year MA 24 x 7 x 4 IOR 4-hour average response	29R4963
1-year MA 24 x 7 x 2 IOR 2-hour average response	29R4964



<b>Description</b>	<b>Part number</b>
2-year MA 9 x 5 IOR next-business-day response	29R4965
2-year MA 9 x 5 x 4 IOR 4-hour average response	29R4966
2-year MA 24 x 7 x 4 IOR 4-hour average response	29R4967
2-year MA 24 x 7 x 2 IOR 2-hour average response	29R4968
3-year 9 x 5 x 4 IOR 4-hour average response	29R4969
3-year 24 x 7 x 4 IOR 4-hour average response	29R4970
3-year 24 x 7 x 2 IOR 2-hour average response	29R4971
4-year 9 x 5 IOR next-business-day response	29R4972
4-year 9 x 5 x 4 IOR 4-hour average response	29R4973
4-year 24 x 7 x 4 IOR 4-hour average response	29R4974
4-year 24 x 7 x 2 IOR 2-hour average response	29R4975
5-year 9 x 5 IOR next-business-day response	29R4976
5-year 9 x 5 x 4 IOR 4-hour average response	29R4977
5-year 24 x 7 x 4 IOR 4-hour average response	29R4978
5-year 24 x 7 x 2 IOR 2-hour average response	29R4979

These ServicePac offerings are valid for models announced in the United States.

### ***Maintenance service charges (ICA)***

#### ***Alternative service (Warranty service upgrades)***

**IOR  
24 x 7**

\$69

#### ***Annual maintenance service***

**IOR                      IOR  
9 x 5                      24 x 7**

\$58

\$83

For ServiceElect (ESA) Maintenance Service Charges, contact IBM Global Services at 888-IBM-4343 (426-4343).

**IBM Global Financing:** IBM Global Financing offers competitive financing to credit-qualified customers to assist them in acquiring IT solutions. Our offerings include financing for IT acquisition, including hardware, software, and services, both from IBM and other manufacturers or vendors. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or visit the Web at

<http://www.ibm.com/financing>

IBM Global Financing offerings are provided through IBM Credit LLC in the United States and other IBM subsidiaries and divisions worldwide to qualified commercial and government customers. Rates are based on a customer's credit rating, financing terms, offering type, equipment type, and options, and may vary by country. Other restrictions may apply. Rates and offerings are subject to change, extension, or withdrawal without notice. Financing solutions from IBM Global Financing can help you stretch your budget and affordably acquire the new product. But beyond the initial acquisition, our end-to-end approach to IT management can also help keep your technologies current, reduce costs, minimize risk, and preserve your ability to make flexible equipment decisions throughout the entire technology life cycle. For more financing information, visit

<http://www.ibm.com/financing>

#### ***Trademarks***

EIA, ServiceSuite, and BladeCenter are trademarks of International Business Machines Corporation in the United States or other countries or both.

xSeries, IntelliStation, eServer, and ServicePac are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Microsoft, Windows NT, and Windows are trademarks of Microsoft Corporation.

Linux is a trademark of Linus Torvalds in the United States, other countries or both.

Other company, product, and service names may be trademarks or service marks of others.