IBM 9910 Uninterruptible Power Systems safeguard your equipment and data from power problems

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At a glance

The IBM® 9910 Uninterruptible Power Systems offer you:

- Models that are tested and approved by IBM
- An extended Eaton-Powerware warranty supported by IBM
- A premium service package (including battery)
- Enhanced conditioning of utility power and battery backup

Overview

All IBM 9910 Uninterruptible Power Systems have passed IBM's testing procedures and are intended to provide a convenient, single source for protection of IBM servers. These new 9910 products are compatible with the power requirements of:

- IBM System i5® and p5 servers
- IBM eServer™ iSeries®, pSeries®, and OpenPower® servers
- IBM AS/400® and RS/6000® servers
- IBM TotalStorage® solutions

All 9910 Uninterruptible Power Systems include a premium Eaton-Powerware Five-Year Gold Plan warranty package that is designed to enhance the potential for a return on investment as compared to other power supplies available on the market today. In addition, the warranty:

- Extends coverage of the device (refer to the specific product warranty period)
- Provides remote problem determination and next-day exchange (if available) by the device manufacturer (when necessary)
- Offers a single point of contact through the IBM Call Center

For a complete description of each device, refer to the Description section of this announcement.

Key prerequisites

The key prerequisites consist of the operating system and the selected applications that are required for your business.
Availability date

July 28, 2009:

- 9910 Model E50
- 9910 Model E15

Description

With today’s announcement, IBM offers the following Eaton Powerware devices:

IBM 9910 Model E50 (Powerware 9135) is a 5000 VA, 208 to 240 V ac, single-phase Uninterruptible Power System that helps protect equipment up to 3500 watts. This true online, double conversion device features load segments for scheduled shutdowns, extended run times, and a versatile design that allows the power system to be rack-mounted or a tower unit. Under normal power conditions, the 9135 can operate in high-efficiency mode at up to 97 percent efficiency thus decreasing utility and cooling bills. In double conversion mode, the UPS operates at up to 91 percent efficiency. The ability to add up to four extended battery modules (feature number 6648) extends battery run times. A built-in AS/400 relay communication port provides the standard communication to the server. The OP Ethernet Card expands control and monitoring of the power system and network devices.

Powerware offers the OP Ethernet Card (# 2941) to provide enhanced monitoring capabilities with IBM Active Energy Manager for i5, iSeries, or AS/400 and p5, pSeries, or RS/6000 rack clients with Microsoft® Windows®, i5/OS®, AIX®, Linux®, or other operating system servers.

IBM 9910 Model E15 (Powerware 9130) is a 1500 VA, single-phase Uninterruptible Power System that protects equipment up to 1350 watts. This online doubleconversion unit delivers 1500 VA of power in a tower form factor. When power conditions are within acceptable limits, the 9130 can operate in a high-efficiency mode providing 95 percent or higher efficiency. The unit also provides six 5-15R outputs and supports up to four extended battery modules (# 6647) for extended run times. The E15 comes with a pre-installed card that offers multiple communication protocols for serial connection with pSeries models as well as AS/400 relay communication.

Powerware offers the OP Ethernet Card (# 2941) to provide network-based communications capabilities for p5, pSeries, and RS/6000 rack clients running Eaton’s Network Shutdown Module or NetWatcher.

Accessibility by people with disabilities

For hardware offerings, the following features support use by people with disabilities:

- Controls and latches are operable with one hand and limited dexterity.
- Keys are discernible by touch without activating them.
- Ports and connectors support connection of industry-standard devices.

Product number

<table>
<thead>
<tr>
<th>Description</th>
<th>Machine</th>
<th>Model</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerware 9135 5 kVA tower or rack-mount</td>
<td>9910</td>
<td>E50</td>
<td></td>
</tr>
<tr>
<td>Powerware 9135 5 kVA Ext. Battery Module</td>
<td>9910</td>
<td>E50</td>
<td>6648</td>
</tr>
<tr>
<td>Powerware 9130 1.5 kVA Ext. Battery Module</td>
<td>9910</td>
<td>E15/E16</td>
<td>6647</td>
</tr>
</tbody>
</table>
OP Ethernet Card 9910 E50/E15 E16 2941
Rack Cont. Specify: 9910/E50-3EIA 7014 T00,T42 B42 0337
Rack Cont. Specify: 9910/6648-3EIA 7014 T00,T42 B42 0338

Powerware 9130 1.5 kVA tower 9910 E15

The following 9910 UPS machine type, model/feature numbers were previously announced for pSeries and iSeries models:

<table>
<thead>
<tr>
<th>Description</th>
<th>Machine</th>
<th>Model</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Plug Type 64 14 ft.</td>
<td>9910</td>
<td>E50</td>
<td>1424</td>
</tr>
<tr>
<td>Power Cord, L6-30 to IEC309P 14Ft</td>
<td>9910</td>
<td>E50</td>
<td>1426</td>
</tr>
<tr>
<td>Power Cord L6-30 to New Zealand 30A (PDL)</td>
<td>9910</td>
<td>E50</td>
<td>1427</td>
</tr>
<tr>
<td>Factory Install for rack UPS for pSeries</td>
<td>9910</td>
<td>E50</td>
<td>9010</td>
</tr>
<tr>
<td>Field Install for rack UPS for pSeries</td>
<td>9910</td>
<td>E50</td>
<td>9011</td>
</tr>
<tr>
<td>Factory Install for rack UPS for iSeries</td>
<td>9910</td>
<td>E50</td>
<td>9012</td>
</tr>
<tr>
<td>Field Install for rack UPS for iSeries</td>
<td>9910</td>
<td>E50</td>
<td>9013</td>
</tr>
<tr>
<td>Tower Form Factor</td>
<td>9910</td>
<td>E50</td>
<td>9014</td>
</tr>
<tr>
<td>Power cord 14 ft. 30A single phase</td>
<td>9910</td>
<td>E50</td>
<td>2972</td>
</tr>
<tr>
<td>Power cord 4 ft. 30A single phase (Burndy to NEMA L6-30P)</td>
<td>9910</td>
<td>E50</td>
<td>2973</td>
</tr>
<tr>
<td>Power cord 6 ft. single phase</td>
<td>9910</td>
<td>E50</td>
<td></td>
</tr>
<tr>
<td>Powerware 9135 5 kVA tower PPDM (NEMA dist. module)</td>
<td>9910</td>
<td>E50</td>
<td>6571</td>
</tr>
<tr>
<td>Powerware 9135 5 kVA tower PPDM (IEC dist. module)</td>
<td>9910</td>
<td>E50</td>
<td>6572</td>
</tr>
<tr>
<td>IBM Plug Type 11 6 ft.</td>
<td>9910</td>
<td>E50</td>
<td>1420</td>
</tr>
<tr>
<td>Power Cord L6-30 to L6-30 14 ft.</td>
<td>9910</td>
<td>E50</td>
<td>1421</td>
</tr>
<tr>
<td>IBM Plug Type 12</td>
<td>9910</td>
<td>E50</td>
<td>1422</td>
</tr>
<tr>
<td>Power Cord L6-30 to L6-30 6 ft.</td>
<td>9910</td>
<td>E50</td>
<td>1423</td>
</tr>
<tr>
<td>IBM Plug Type 12</td>
<td>9910</td>
<td>E50</td>
<td></td>
</tr>
<tr>
<td>Power Cord L6-30 (IBM Plug Type 12) to Russellstoll IBM Plug Type 40 6 ft.</td>
<td>9910</td>
<td>E50</td>
<td></td>
</tr>
<tr>
<td>Power Cord L6-30 IBM Plug Type 12 to Russellstoll IBM Plug Type 40 14 ft.</td>
<td>9910</td>
<td>E50</td>
<td></td>
</tr>
</tbody>
</table>

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business Partner information for this announcement. A PartnerWorld® ID and password are required (use IBM ID).


Publications

Product-specific publications are shipped with the products. Additional copies are available from the associated UPS supplier.
Services

Global 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 to be an On Demand 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 available IBM Business Continuity and Recovery Services, contact your IBM representative or visit

http://www.ibm.com/services/continuity

For details on education offerings related to specific products, visit


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

Technical information

Specified operating environment

**Physical specifications**

Physical specifications are subject to change. More detailed specifications can be obtained from your IBM representative or at the following Web site

http://www.powerware.com/ibm

Model E50 (5000 VA, 3500 W)

width: 444.5 mm (17.5 in)
Depth: 741 mm (29.2 in)
Height: 130.6 mm (5.14 in), 3 EIA units
Weight: 57 kg (125.7 lb)

Feature 6648 (Extended Battery Module for E50)

width: 444.5 mm (17.5 in)
Depth: 650 mm (29.2 in)
Height: 130.6 mm (5.14 in), 3 EIA units
Weight: 70.5 kg (155.4 lb)

Feature 6647 (Extended Battery Module for E15/E16)

width: 160 mm (6.3 in)
Depth: 434 mm (17 in)
Height: 231 mm (9.1 in)
Weight: 24 kg (52.9 lb)

Model E15 (1500 VA, 1350 W)width: 160 mm (6.3 in)
Depth: 434 mm (17 in)
Height: 231 mm (9.1 in)
Weight: 19 kg (41.8 lb)

To assure installability and serviceability in non-IBM industry-standard racks, review the installation planning information for any product-specific installation requirements.
**Operating environment**

**Model E50**

- Temperature: 0 to 40.0 degrees C (32 to 104 degrees F)
- Relative humidity: 0 to 95 percent
- Wet bulb (caloric value): 1182 Btu/hr
- Electrical power: 346 Watts
- Capacity of exhaust: 59 cubic feet/minute
- Leakage and starting current: 7 mA max/200 A peak - 1 ms max

**Model E15**

- Temperature: 0 to 40.0 degrees C (32 to 104 degrees F)
- Relative humidity: 0 to 95 percent
- Wet bulb (caloric value): 670 Btu/hr
- Electrical power: 196 Watts
- Capacity of exhaust: 51 cubic feet/minute
- Leakage and starting current: 1.5 mA max/45 A peak

**Software requirements**

If you want the Uninterruptible Power Supply to communicate with your computer, refer to the following table to determine which communication option and/or software is correct for your application.

<table>
<thead>
<tr>
<th>Powerware Software Suite CD and Serial Cable</th>
<th>Feat 2941 OP Ethernet Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM i5 / iSeries server (1)</td>
<td>X(1)</td>
</tr>
<tr>
<td>IBM i5 / iSeries server and Serial (TTY) server (1) (Windows, Linux, AIX, and so on)</td>
<td>X</td>
</tr>
<tr>
<td>IBM p5 / pSeries, OpenPower or xSeries server with single Serial (TTY) connection</td>
<td>X</td>
</tr>
<tr>
<td>IBM p5 / pSeries, OpenPower with LPARs and/or Network (Web server) connection</td>
<td>X</td>
</tr>
</tbody>
</table>

(1) Uninterruptible Power Supply monitoring is a standard feature of the i5/iSeries (AS/400) operating system. For logical partitions of the p5/pSeries operating system, a NetWatch client will be loaded onto each LPAR. Corequisite: Feature number 2941, ConnectUPS Web/SNMP/xHub network card. The 9910 solutions come with a complimentary Powerware Software Suite CD which incorporates power technology with the control software you need for effective network monitoring, analysis, power management, SNMP, and power supply system remote shutdown. Software suite contents include LanSafe and NetWatch software and a 30-day trial version of PowerVision. Powerware Extensions for IBM Director and MultiView are downloadable from the Web. With comprehensive Network Power Management and 9910 solutions from Eaton, you can realize key benefits of:

- Real-time information on network-wide power quality and events that affect system availability
- Control of power connected to individual or network devices
- Continuous clean power to each device
- Automatic and graceful shutdown of individual or network devices during extended power outages
- Monitoring to analyze and diagnose network problems
Software to application matrix

<table>
<thead>
<tr>
<th>Application</th>
<th>Powerware Software</th>
<th>Powerware Extension for IBM Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single pSeries (serial/TTY) non-LPAR</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Single pSeries (network) non-LPAR</td>
<td>X(1)</td>
<td>X(1)</td>
</tr>
<tr>
<td>Single pSeries (LPAR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple pSeries (non-LPAR)</td>
<td>X</td>
<td>X(1)</td>
</tr>
<tr>
<td>Multiple pSeries (LPAR)</td>
<td></td>
<td>X(1)</td>
</tr>
<tr>
<td>IBM Director network device</td>
<td></td>
<td>X(1)</td>
</tr>
</tbody>
</table>

Note: Uninterruptible Power System for iSeries applications utilize OS/400® power system monitoring functions.

(1) Corequisite: Feature number 2941, OP Ethernet card. network card.

Application Comparison Matrix

<table>
<thead>
<tr>
<th>Software</th>
<th>Monitoring</th>
<th>Shutdown</th>
<th>GUI</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>LanSafe</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>NetWatch</td>
<td>-</td>
<td>Y</td>
<td>-</td>
<td>N/N</td>
</tr>
<tr>
<td>MultiView(1)</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>OP Ethernet card.</td>
<td>Y(1)</td>
<td>Y(2)</td>
<td>Y</td>
<td>Y/Y</td>
</tr>
</tbody>
</table>

UPS Application

<table>
<thead>
<tr>
<th>Software</th>
<th>SSL/SSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>LanSafe</td>
<td>N/N</td>
</tr>
<tr>
<td>NetWatch</td>
<td>N/N</td>
</tr>
<tr>
<td>OP Ethernet card</td>
<td>Y/Y</td>
</tr>
</tbody>
</table>

(1) Via Web browser, LanSafe, or Network Management System.
(2) In conjunction with NetWatch software.

Delivering a strong power management and power system monitoring tool to your desktop, the MultiView monitoring program uses your existing Internet Explorer and helps increase its functionality through several valuable features:

- Allows the user to view multiple Web sites simultaneously within a single browser window
- Searches for and automatically adds browser pages of connected feature number 2941 OP Ethernet card as well as Status@aGlance monitoring feature from the Powerware LanSafe V5 software.

The following are some of the operating systems supported by LanSafe V5:

- AIX V4.1 and 4.3.2 for RISC; V4.3.3, 5.1, 5.2, and 5.3 for Power PC®
- Red Hat Linux V7.1, 7.2, 7.3, 8.0, and 9.0
- SUSE Linux V7.2, 8.0, and 8.2
- SUSE Enterprise Linux Server 8
- Windows 2000, Windows 98, Windows Me, Windows NT® 4.0, Windows XP (Home and Professional), Windows Server 2003 (Standard, Web, and Enterprise), and Vista

The following are some of the operating systems supported by NetWatch:

- IBM AIX V4.x and 5.x (Power PC)
- Linux kernel V2.0 and higher (x86 and AXP)
- Windows 9x, NT, 2000, and XP

The following are operating systems supported by MultiView:
• Windows 98, Me, 2000, and XP

For a listing of current supported operating systems and information about Powerware power system, network, and enterprisewide monitoring and control software, refer to the following Web site

http://www.powerware.com/software/products.asp

Planning information

Customer responsibilities

The 9910 Models E15 and E50 are designated as customer setup.

If any of the above models are not ordered with the iSeries and pSeries rack, the client will be responsible for the installation of external cables, the power system module, and the battery module. Clients who request IBM service personnel to perform these activities are subject to a charge. Client responsibilities include:

• Adequate site and system planning, and preparation
• Receipt, unpacking, and placement of the system unit
• Ordering, installing, and maintaining cables with associated parts for attaching to the pSeries model
• Using and following the problem determination procedures in the operators guide
• Installing power system management software and setting power system run-time parameters
• Installing feature number 2941 and 2942 interface cards

Cable orders

9910 Model E50

Power (electrical) cables

The input (mains) power connection to the 9910-E50 is an NEMA L6-30AR, 16 amp connector. The input (mains) power cord from the power system to the utility (mains) is determined based upon the country or locality. Refer to the following 9910-E50 input power cord table:

<table>
<thead>
<tr>
<th>Feature number</th>
<th>Plug Type</th>
<th>Plug description</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1420</td>
<td>12</td>
<td>NEMA L6-30</td>
<td>14 ft/4.4 m</td>
</tr>
<tr>
<td>1421</td>
<td>12</td>
<td>NEMA L6-30</td>
<td>6 ft/1.8 m</td>
</tr>
<tr>
<td>1422</td>
<td>40</td>
<td>RS 3750</td>
<td>6 ft/1.8 m</td>
</tr>
<tr>
<td>1423</td>
<td>40</td>
<td>RS 3750</td>
<td>14 ft/4.4 m</td>
</tr>
<tr>
<td>1424</td>
<td>46</td>
<td>IEC309 (P+N+G) 32A</td>
<td>14 ft/4.4 m</td>
</tr>
<tr>
<td>1426</td>
<td>PDL</td>
<td>PDL</td>
<td>14 ft/4.4 m</td>
</tr>
<tr>
<td>1427</td>
<td>PDL-NZ</td>
<td>PDL-NZ</td>
<td>14 ft/4.4 m</td>
</tr>
</tbody>
</table>

When the 9910-E50 is used as a rack model and the PDU is a 7188/5889 or 9188/7109 and the plug is an L6-30 (#6654), the 6654 can plug directly into the E50. For those PDUs with other than the 6654 cord, feature number 9910-2972 or 2973 is required. The E50 has four L6-30 outlet. A PDU is required for an E50 in a rack. When the 9910-E50 is employed in a tower configuration in NEMA-type countries, the E50 will require one NEMA-type PowerPass Distribution Module (PPDM), IBM feature number 6571, which contains output (receptacle) connections described in the feature number 6571 output connection table. IBM plug types supported are referenced.

Feature 6571 output connection table

<table>
<thead>
<tr>
<th>NEMA type</th>
<th>Qty provided</th>
<th>IBM plug type(s) supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-15/5-20</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>6-15/6-20</td>
<td>4</td>
<td>5/29</td>
</tr>
<tr>
<td>L6-15</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>
If the plug type selected for the equipment to be protected by the 9910-E50 is not contained in this table, change the plug type on the equipment to match plug types available with feature number 6571. When the 9910-E50 is employed in a tower configuration in IEC type countries, the E50 will require one IEC type PowerPass Distribution Module (PPDM), IBM feature number 6572, which contains output (receptacle) connections described in the feature number 6572 output connection table. IBM plug types supported are referenced. The feature number 6572 contains two IEC-320-C19 to C20 (9 ft length) and six IEC-320-C13 to C14 (6 ft length) power cords and a relocated in the 6572 carton.

Feature 6572 output connection table

<table>
<thead>
<tr>
<th>NEMA type</th>
<th>Qty provided</th>
<th>IBM plug type(s) supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC-320-C13 (10A)</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>IEC-320-C19 (16A)</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>IEC309 (P+N+G) (32A)</td>
<td>1</td>
<td>46</td>
</tr>
</tbody>
</table>

Power electrical cable installation diagrams are at the following Web site


Feature 6648 (external battery module)

The input power to the 6648 is DC and is provided by the E50. Connection of the 6648 DC cable (Anderson type DC connector) is the responsibility of the customer and is performed at installation. Feature number 6648 is a line-up-and-match cabinet connected to the E50 cabinet or installed in the rack with the E50.

Communication cables

One server to power system serial TTY interface cable DB9M to DB9F (6 ft/1.8 m length) is included with the E50 (contained in the E50 Accessory Kit carton) for all (iSeries and pSeries) orders. The E50 includes a single serial port (DB9) contained on the back-plane of the E50. Optional communications features #2941 can replace the single-port serial card. A maximum of one feature number 2941 is supported. The optional feature number 2941 (OP Ethernet Card)

Power electrical cable installation diagrams are at the following Web site


Security, auditability, and control

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

**IBM Global Financing**

No

**Warranty period**

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

IBM hardware products are manufactured from new parts, or new and used parts. In some cases, the hardware product may have been previously installed. Regardless, IBM warranty terms apply.
Models E50 and E15 have a five-year Advanced Element Exchange Warranty (including battery) provided by Eaton with IBM as point of contact.

When a type of service involves the exchange of a machine part, the replacement may not be new, but will be considered equivalent to new.

**Warranty service**

IBM 9910 Models E15 and E50 provide a premium Element Exchange Warranty. In case of problems with the UPS, contact IBM Service Support. IBM will coordinate remote diagnostics and manage the Element Exchange Warranty, if necessary.

If a replacement element is required, the UPS manufacturer will process and ship the request the same day if the request is received before noon (12:00 p.m.) local time. After noon, the replacement element will be shipped the following business day. The replacement element will be next-day air service (same type of carrier used in the U.S., for example, Federal Express, Airborne Express). The shipping costs to and from the client location are the responsibility of the UPS manufacturer.

Advanced Element Exchange Warranties DO NOT include onsite service unless specifically noted in writing at the time of equipment sale.

**Client responsibility**

For 9910 Models E15 and E50 the client's responsibilities for element exchange are:

- Receipt, unpacking, installation, and exchange of the defective element
- Packaging of the defective element in the container received with the replacement element
- Following the instructions provided for return of the defective element
- Returning the defective element so that it is received at Powerware UPS depot center within the established time from the arrival of the replacement

Technical information can also be accessed at the following Web site

http://www.powerware.com/ibm

Warranty service is available from the IBM Field Support Services Center at 800-IBM-SERV (426-4968).

**Warranty service upgrades**

During the warranty period, warranty service upgrades provide 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.

IBM will attempt to resolve your problem over the telephone or electronically by access to an IBM Web site. You must follow the problem determination and resolution procedures that IBM specifies. Scheduling of service will depend upon the time of your call and is subject to parts availability.

**Maintenance service options**

**On-site 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 on-site response-time objectives are available as warranty service upgrades for your machine. Available offerings are:
- 9 hours per day, Monday through Friday, excluding holidays, 4 hour average, same business day response
- 24 hours per day, 7 days a week, 4 hour average response
- 24 hours per day, 7 days a week, 2 hour average response

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

**Maintenance services**

If required, IBM provides repair or exchange service depending on the types of maintenance service specified for the Machine. IBM will attempt to resolve your problem over the telephone or electronically, via an IBM Web site. You must follow the problem determination and resolution procedures that IBM specifies. 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 maintenance 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. The following service selections are available as maintenance options for your machine type.

**On-site 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.

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

**Customer Replaceable Unit Service:** If your problem can be resolved with a CRU (for example, keyboard, mouse, speaker, memory, or hard disk drive), and depending upon the maintenance service offerings in your geography, 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 upon your request.

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, 1) return instructions and a container are shipped with the replacement CRU and 2) you may be charged for the replacement CRU if IBM does not receive the defective CRU within 15 days of your receipt of the replacement.

CRUs may be provided as part of the machine's standard maintenance service except that you may install a CRU yourself or request IBM installation, at no additional charge, under any of the On-site Service levels specified above.

**Courier or Depot Service:** You must disconnect the failing machine for collection arranged by IBM. IBM will provide you with a shipping container for you to return your machine to a designated service center. A courier will pick up your machine and deliver it to the designated service center. Following its repair or exchange, IBM will arrange the return delivery of the machine to your location. You are responsible for its installation and verification.

**Customer Carry-In or Mail-In Service:** You will deliver or mail, as IBM specifies (prepaid, unless IBM specifies otherwise) the failing machine suitably packaged to a location IBM designates. After IBM has repaired or exchanged the machine, IBM
will make it available for your collection or, for mail-in service, IBM will return it to you at IBM's expense, unless IBM specifies otherwise. You are responsible for the subsequent installation and verification of the machine.

*Machine Exchange Service:* IBM will initiate shipment of a replacement machine to your location. You are responsible for its installation and verification of operation. You must pack the failed machine into the shipping container that contained the replacement machine and return the failed machine to IBM. Transportation charges, both ways, are paid by IBM. You may be charged for the replacement machine if IBM does not receive the failed machine within 15 days of your receipt of the replacement.

**Non-IBM parts support**

Under certain conditions, IBM repairs selected non-IBM parts at no additional charge for machines that are covered under warranty service upgrades or maintenance services.

IBM Service provides hardware problem determination on non-IBM parts (for example, adapter cards, PCMCIA cards, disk drives, memory) installed within IBM machines covered under warranty service upgrades or maintenance services and provides the labor to replace the failing parts at no additional charge.

If IBM has a Technical Service Agreement with the manufacturer 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 part 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 a maintenance service.

**Usage plan machine**

No

**IBM hourly service rate classification**

Two

When a type of service involves the exchange of a machine part, the replacement may not be new, but will be in good working order.

**Maintenance service offerings**

These machines are not covered under the IBM Maintenance Agreement. Contact your local IBM Services Branch office for Post Warranty Options.

**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 program license charges apply**

No

**Licensed internal code and licensed machine code**
These products do not contain Licensed Internal Code or Licensed Machine Code.

**Educational allowance**

Not applicable

**Prices**

For all charges, contact your IBM representative.

<table>
<thead>
<tr>
<th>Description</th>
<th>Machine type</th>
<th>Model</th>
<th>Feature Number</th>
<th>CSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerware 9125 5 kVA tower or rack-mount</td>
<td>9910</td>
<td>E50</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Powerware 9125 5 kVA Ext. Battery Module</td>
<td>9910</td>
<td>E50</td>
<td>6648</td>
<td>Yes</td>
</tr>
<tr>
<td>Powerware 9130 1.5kVA</td>
<td>9910</td>
<td>E15</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Powerware Ext. Battery Module</td>
<td>9910</td>
<td>E15</td>
<td>6647</td>
<td>Yes</td>
</tr>
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<td>OP Ethernet Card</td>
<td>9910</td>
<td>E50,E15</td>
<td>2941</td>
<td>Yes</td>
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<td>Rack Cont. Specify: 9910/E50-3EIA</td>
<td>7014</td>
<td>T00,T42</td>
<td>B42</td>
<td>0337</td>
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<tr>
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</table>

Field | Plant | MES
-----|-------|-----
No    | Install | Only
Only | Only   | Removal

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