

IBM System x 750W High Efficiency -48 V DC Power Supply

Attention:

- Only trained service personnel other than IBM service technicians are authorized to install and remove the -48 volt dc power supply, and make the connections to and disconnections from the -48 volt dc power source. IBM service technicians are not certified or authorized to install or remove the -48 volt power cable. The customer is responsible for ensuring that only trained service personnel install or remove the -48 volt power cable.
- Before you install a dc power supply in the server, you must remove all ac power supplies. Do not use both ac and dc power supplies in the same server. Install up to two dc power supplies or up to two ac power supplies, but not a combination.

See the server documentation for detailed instructions for installing this option in the server.



The option kit contains the following items:

- One dc power supply
- One power information label
- One redundant power information label
- IBM warranty information document
- Important notices document
- This document

Notes:

1. If you are replacing a power supply with one of a different wattage in the server, apply the new power information label provided over the existing power information label on the server. Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.

额定电压 -xxxx V	
Product certified in Shenzhen, China Marca Registrad ®Registered Trademark of International Business Machines Corporation	Apparaten skali ansiutas till jordat uttag Apparatet må tilkoples jordet stikkontak Laite on liitettävä suojamaadoituskoskettiimilla varustettuun pistorasiaan This device complies with part 15 of FCC rules. Operation is subject to the following two
	conditions: (1) this device may not cause harmful 求採取某些適當的對策。 interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Copyright Code and Parts Contained Herein. ©Copyright IBM Corp. 2012 All Rights Reserved. Canada ICES/NMB-003 Class/Classe A	CUUUS CE CC CC ALL ALL ALL ALL ALL ALL ALL ALL A
この装置は、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 を課ざるとき可かせたことがあります、VCCL-A	LISTED I.T.E. Equip. 167G

2. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server cover near the power supplies.



3. It is the customer's responsibility to supply the necessary power cable.

To reduce the risk of electric shock or energy hazards:

- Use a circuit breaker that is rated at 25 amps.
- Use 2.5 mm² (12 AWG) at 90° C copper wire.
- Torque the wiring-terminal screws to 0.50 ~ 0.60 newton-meters (4.43 ~ 5.31 inch-pounds).

For more information, see Statement 34 on page 4.

- 4. If the power source requires ring terminals, you must use a crimping tool to install the ring terminals to the power cord wires. The ring terminals must be UL approved and must accommodate the wire that is described in note 3.
- 5. The illustrations in this document might differ slightly from your model.

Store this document with your other product documentation for future reference.

The product-specific documentation is provided on the IBM *Documentation* CD that comes with your server. IBM maintains pages on the World Wide Web where you can get the latest technical information and download device drivers and updates. To access these pages, go to http://www.ibm.com/supportportal/ and follow the instructions.

Statement 29:



CAUTION: This equipment is designed to permit the connection of the earthed conductor of the dc supply circuit to the earthing conductor at the equipment.

This equipment is designed to permit the connection of the earthed conductor of the dc supply circuit to the earthing conductor at the equipment. If this connection is made, all of the following conditions must be met:

- This equipment shall be connected directly to the dc supply system earthing electrode conductor or to a bonding jumper from an earthing terminal bar or bus to which the dc supply system earthing electrode conductor is connected.
- This equipment shall be located in the same immediate area (such as, adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same dc supply circuit and the earthing conductor, and also the point of earthing of the dc system. The dc system shall not be earthed elsewhere.
- The dc supply source shall be located within the same premises as this equipment.
- Switching or disconnecting devices shall not be in the earthed circuit conductor between the dc source and the point of connection of the earthing electrode conductor.

Statement 31:



DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded power source.
- Connect to properly wired power sources any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached ac power cords, dc power sources, network connections, telecommunications systems, and serial cables before you open the device covers, unless you are instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when you install, move, or open covers on this product or attached devices.

To Connect:

- 1. Turn OFF all power sources and equipment that is to 1. Turn OFF all power sources and equipment that is to be attached to this product.
- 2. Attach signal cables to the product.
- 3. Attach power cords to the product.
 - For ac systems, use appliance inlets.
 - For dc systems, ensure correct polarity of -48 V dc connections: RTN is + and -48 V dc is -. Earth ground should use a two-hole lug for safety.
- 4. Attach signal cables to other devices.
- 5. Connect power cords to their sources.
- 6. Turn ON all the power sources.

Statement 33:



To Disconnect:

- be attached to this product.
 - For ac systems, remove all power cords from the chassis power receptacles or interrupt power at the ac power distribution unit.
 - For dc systems, disconnect dc power sources at the breaker panel or by turning off the power source. Then, remove the dc cables.
- 2. Remove the signal cables from the connectors.
- 3. Remove all cables from the devices.

CAUTION:

This product does not provide a power-control button. Turning off blades or removing power modules and I/O modules does not turn off electrical current to the product. The product also might have more than one power cord. To remove all electrical current from the product, make sure that all power cords are disconnected from the power source.



Statement 34:



CAUTION:

To reduce the risk of electric shock or energy hazards:

- This equipment must be installed by trained service personnel in a restricted-access location, as defined by the NEC and IEC 60950-1, First Edition, The Standard for Safety of Information Technology Equipment.
- Connect the equipment to a properly grounded safety extra low voltage (SELV) source. A SELV source is a secondary circuit that is designed so that normal and single fault conditions do not cause the voltages to exceed a safe level (60 V direct current).
- Incorporate a readily available approved and rated disconnect device in the field wiring.
- See the specifications in the product documentation for the required circuit-breaker rating for branch circuit overcurrent protection.
- Use copper wire conductors only. See the specifications in the product documentation for the required wire size.
- See the specifications in the product documentation for the required torque values for the wiring-terminal screws.



Important: Be sure to read the multilingual safety instructions on the CD that comes with the server before you use the product.

Installing the dc power supply

To install the dc power supply, complete the following steps:

- 1. See the server documentation for installation guidelines and additional safety information.
- 2. If the server is operating, turn off the server and peripheral devices.
- **3**. Turn off the circuit breaker for the dc power source to which the new power supply will be connected. Disconnect the power cord from the dc power source.
- 4. Attach the dc power cable to the new power supply. Make sure the wires are connected securely to the -48V, ground, and -48V return terminals as the following illustration shown.



- 5. Remove the power-supply bay filler panel from the empty power-supply bay.
- 6. Slide the power supply into the bay until it clicks into place. Make sure that you have pushed the power supply far enough forward that it connects firmly to the power-supply backplane.
- 7. Connect the other ends of the dc power cable to the dc power source. Cut the wires to the correct length, but do not cut them shorter than 150 mm (6 inch). If the power source requires ring terminals, you must use a crimping tool to install the ring terminals to the power cord wires. The ring terminals must be UL approved and must accommodate the wires that are described in note 4 on page 2. The minimum nominal thread diameter of a pillar or stud type of terminal must be 4 mm; for a screw type of terminal the diameter must be 5.0 mm.
- 8. Turn on the circuit breaker for the dc power source to which the new power supply is connected.
- **9**. Make sure that the green power LEDs on the power supply are lit, indicating that the power supply is operating correctly.
- **10**. If you are replacing a power supply with one of a different wattage in the server, apply the new power information label provided over the existing power information label on the server. Power supplies in the server must be with the same power rating or wattage to ensure that the server will operate correctly.



11. If you are adding a power supply to the server, attach the redundant power information label that comes with this option on the server cover near the power supplies.

	XXXW = DC	XXXW - DC
	额定电压 額定電壓 XX to XXVdc	额定电压 額定電壓 XX to XXVdc
-ASD	额定电流 XX.XA 額定電流	额定电流 XX_XA 額定電流

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