

# Facility DC Power Kit

## Installation Instructions

### For Compaq ProLiant BL p-Class System

*Read Instructions Completely  
Before Beginning Installation Procedures*

**COMPAQ**

© 2002 Compaq Information Technologies Group, L.P.

Compaq, the Compaq logo, and ProLiant are trademarks of Compaq Information Technologies Group, L.P. in the U.S. and/or other countries. All other product names mentioned herein may be trademarks of their respective companies.

Compaq shall not be liable for technical or editorial errors or omissions contained herein. The information in this document is provided "as is" without warranty of any kind and is subject to change without notice. The warranties for Compaq products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty.

Facility DC Power Kit Installation Instructions

First Edition (May 2002)  
Part Number 230839-021



230839-021

## Overview

This card provides procedures for installing a Facility DC Power Kit for the Compaq *ProLiant*™ BL p-Class system.

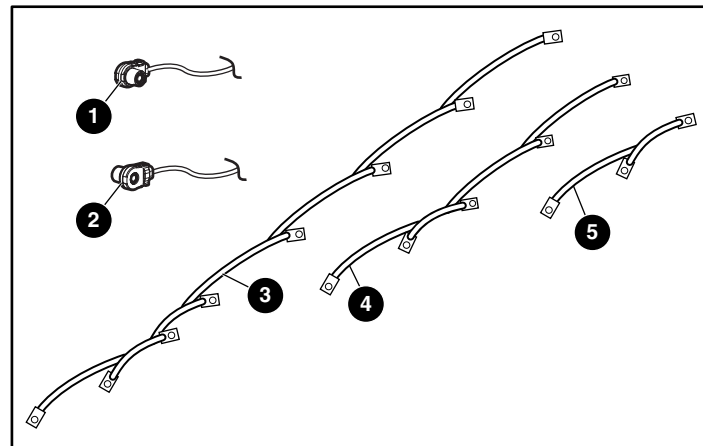
Two pairs of facility DC power cables (two red, two black) provide the recommended redundant connection for buses A and B in a power bus box or mini bus bar configuration. A scalable or dual mini bus bar configuration requires four pairs of facility DC power cables.

The Facility DC Power Kit is only a part of the ProLiant BL p-Class system. Before installing this kit, be sure you have installed the following items:

- Server blade enclosures
- RJ-45 patch panels or interconnect switches
- Scalable bus bars, mini bus bars, or power bus boxes
- Management module cabling
- Network cabling

For information about installing these components, refer to the setup and installation guide on the Documentation CD or to the documentation that ships with the components.

## Kit Contents



### Kit Contents

Item	Description
1	200 A power cables, red (4)
2	200 A power cables, black (4)
3	Scalable configuration grounding cable
4	Mini configuration grounding cable (2)
5	Power bus box configuration grounding cable
Not shown	Hook-and-loop straps (10)
Not shown	This installation card

## Warnings



**WARNING:** This equipment must be installed by a licensed electrician or trained service personnel familiar with high power circuitry.



**WARNING:** Be sure that power to all components is off. Be sure that the power LEDs are not illuminated.

# Installation Requirements

Observe the following requirements before installing a facility DC power kit for your Compaq ProLiant BL p-Class system:

- Be sure that there is available power of  $48 \text{ VDC} \pm 10\%$ , with a source that provides no more than 200 A per cable pair. To determine the minimum power requirement for your facility and server blade needs, refer to the *Compaq ProLiant BL p-Class System Overview and Planning* white paper and use the Compaq ProLiant BL p-Class Sizing Utility tool on the ProLiant BL p-Class product page of the Compaq website:  
[www.compaq.com/products/servers/proliant-bl/p-class/index.html](http://www.compaq.com/products/servers/proliant-bl/p-class/index.html)
- The power source must be considered a secondary circuit in accordance with applicable national requirements for information technology equipment. Generally, these requirements are based on the International Standard for Safety of International Technology Equipment, IEC 60950. The source must have one pole (neutral/return) referenced to earth ground in accordance with local/regional electric codes and/or regulations.
- This product must be connected to a power distribution device that provides a means for disconnecting power from the branch supply circuit. The power distribution device must be provided with an overcurrent protective device suitable for interrupting fault currents available from the main source, and rated no more than 250 A per feed at the source voltage.
- Be sure the installation of this equipment complies with local and regional electrical regulations governing the installation of information technology equipment by licensed electricians.
- The green/yellow lead of the power cable assembly must be connected to a suitable ground/earth terminal located within or near the equipment rack. Do not rely on the rack or cabinet chassis to provide adequate ground/earth continuity.
- Be sure that all data cabling is complete.
- Be sure that all bus bar or power bus box circuit breakers are locked in the off position.

## Preparing for Installation

Be sure that your facility DC source meets the specifications for the Compaq ProLiant BL p-Class system. Refer to the setup and installation guide and the *Compaq ProLiant BL p-Class System Overview and Planning* white paper, available on the Documentation CD and the product page of the Compaq website:

[www.compaq.com/products/servers/proliant-bl/p-class/index.html](http://www.compaq.com/products/servers/proliant-bl/p-class/index.html)

## Installing a Grounding Cable



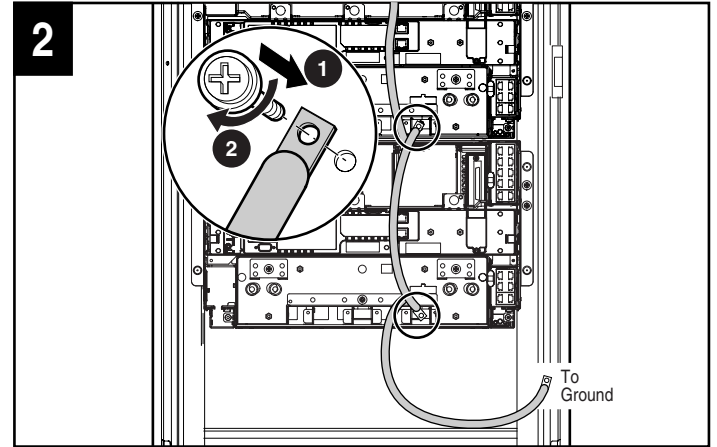
**WARNING:** Each enclosure must be connected to earth/ground. Select the grounding cable appropriate for your hardware configuration to connect the enclosures to an adequate earth/ground terminal.

Some local or regional electrical regulations may require that the equipment rack/cabinet be grounded based on the facility DC circuits feeding the bus bars. In this case, it is still necessary to connect the grounding cable between the enclosures and the earth/ground terminal within the rack/cabinet. Do not rely on the rack or cabinet chassis to provide adequate earth/ground continuity to the enclosures.

1

Select a grounding cable appropriate for your hardware configuration, as follows:

- If you have scalable bus bars, use the scalable configuration grounding cable.
- If you have one pair of mini bus bars, use one mini configuration grounding cable.
- If you have two pairs of mini bus bars, use both mini configuration grounding cables.
- If you have power bus boxes, use the power bus box configuration grounding cable.



3

Repeat step 2 until all enclosures in the rack are connected by the grounding cable.

4

Connect the lower end of the grounding cable to your facility grounding connection.

## Installing Facility DC Power Cables



**WARNING:** Always connect the facility DC power cables to your power distribution components (bus bars or power bus boxes) before connecting the cables to your facility DC source.

To connect facility DC power cables to your power distribution component:

- If you are using scalable or mini bus bars, refer to the bus bar procedures in the setup and installation guide or the documentation that ships with your bus bars.
- If you are using power bus boxes, refer to the documentation that ships with the power bus boxes.

After connecting the facility DC power cables, use the hook-and-loop straps as needed for cable routing purposes.

The installation is complete.

## Preparing for Operation

To prepare for operation:

- Complete all bus bar or power bus box installation procedures using the facility DC cables.
- Power up the system.

Refer to the setup and installation guide on the Documentation CD and the documentation that ships with the bus bars or power bus boxes for more information.