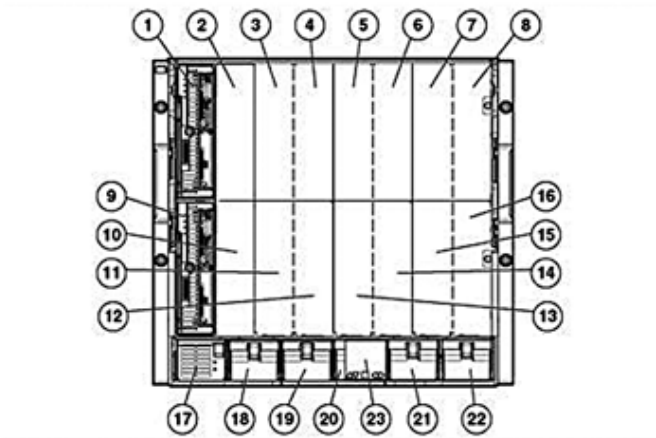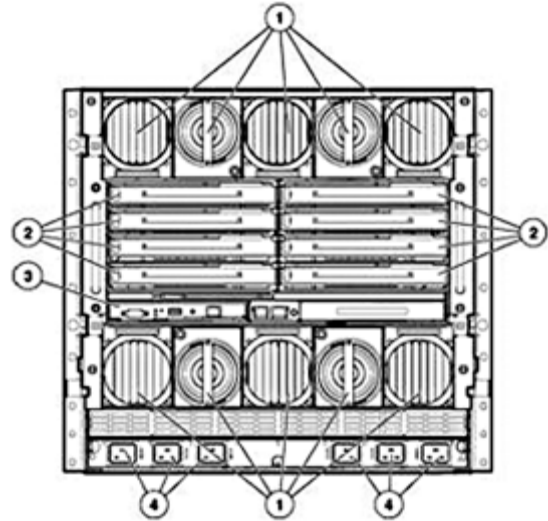## Overview

### HPE BladeSystem c7000 Enclosure and Server Blades - Carrier Grade Supplement



**HPE BladeSystem c7000 Enclosure - Front View**

1. Device Bay 1
2. Device Bay 2
3. Device Bay 3
4. Device Bay 4
5. Device Bay 5
6. Device Bay 6
7. Device Bay 7
8. Device Bay 8
9. Device Bay 9
10. Device Bay 9
11. Device Bay 11
12. Device Bay 12
13. Device Bay 13
14. Device Bay 14
15. Device Bay 15
16. Device Bay 16
17. Power Supply Bay 1
18. Power Supply Bay 2
19. Power Supply Bay 3
20. Power Supply Bay 4
21. Power Supply Bay 5
22. Power Supply Bay 6
23. Insight Display

**HPE BladeSystem c7000 Enclosure - Rear View**

1. Active Cool 200 Fans & fan bays
2. Interconnect Bays
3. Onboard Administrator
4. Power Inputs

**Hewlett Packard Enterprise**

# Overview

## At A Glance

This document covers the NEBS Level 3 certified HPE BladeSystem c7000 Enclosure. This document covers the blades, interconnects, etc. which have passed the NEBS Level 3 and ETSI EN 300 386-2 certifications. Testing and certification is limited to -48VDC powered enclosures. For more information on HPE ProLiant Server Blades and HPE BladeSystem c-Class Interconnect Components please see the following QuickSpecs:

- HPE ProLiant c-Class Server Blades:
  **https://www.hpe.com/us/en/integrated-systems/bladesystem.html**
- HPE BladeSystem c-Class Interconnect:
  **https://www.hpe.com/h20195/v2/GetDocument.aspx?docname=4AA0-5964ENW**
- HPE BladeSystem c3000 Enclosure QuickSpecs:
  **https://www.hpe.com/h20195/v2/GetDocument.aspx?docname=c04123379**

HPE BladeSystem Carrier Grade (CG) solutions start with a BladeSystem c7000 Enclosure, c7000 hot-plug -48VDC power supplies, HPE Active Cool Fans, and an optional redundant Onboard Administrator module. Once the enclosure has been selected, the following components can be added: networking interconnect modules, HPE ProLiant and Integrity Server Blades, and Insight Control management software. Reference the QuickSpecs listed above.

- **Warranty** - This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Additional support may be covered under the warranty or available for an additional fee. Enhancements to warranty services are available through HPE Care Pack services or customized service agreements.
- **Enclosure:** Three-year parts and labor, on-site limited global warranty. Certain restrictions and exclusions apply
- **Enclosure options:** Fans, Power Supplies, Onboard Administrator, 1 Year parts only or enclosure warranty
- **HPE BladeSystem Interconnects:** 1 Year parts and labor, on-site regardless of the warranty period for the system in which they are installed
- **HPE Storage Fibre Channel switches:** have a maximum warranty period of one (1) year regardless of the warranty period for the system in which they are installed
- **SATA hard drives** have a one year parts and labor on-site warranty regardless of the system in which they are installed
- **SAS Enterprise drives** have a 3 year warranty regardless of the system in which they are installed.

For additional information please visit: **http://www.hpe.com/info/bladesystem**

| **HPE BladeSystem c-Class c7000 Enclosure** | A BladeSystem c7000 enclosure holds up to 16 server and/or storage blades plus redundant network and storage switches. It includes a shared, multi-terabit high-speed mid-plane for wire-once connectivity of server blades to network and shared storage. Power is delivered through a pooled power backplane that ensures the full capacity of the redundant hot-plug power supplies is available to all blades. |
|---|---|

Each c7000 Carrier Grade enclosure is built with the following functions:
- Up to 16 half-height and/or up to 8 full-height server blades and/or storage blades per enclosure.
- Up to 4 different interconnect fabrics (Ethernet, FC) supported simultaneously within the enclosure.
- -48V DC power subsystem .
- HPE Thermal Logic technology for lower power consumption and airflow.
- Ten (10) Active Cool 200 fans required for Telco operation

# Overview

- Redundant hot-plug cooling, redundant hot-plug power supplies, redundant connections, redundant interconnect modules, optional redundant Onboard Administrator management modules.
- Lowest cost of ownership.

An Onboard Administrator management module is built into the enclosure with the following functions:
- Robust, multiple enclosure setup and control.
- Reports asset and inventory information for the devices in the enclosure.
- Reports thermal and power information, including real-time actual power usage per server and per enclosure.
- Front-mounted Insight Display for easy management within the datacenter.
- Integrated access to all server blade iLOs from a single cable.
- Provides integrated access to interconnect bay device management ports from the single Onboard Administrator cable.
- Single sign-on capability for all devices in the enclosure
- Role-based security locally and/or with LDAP directory services.
- Provides a wizard-based initial setup process for easy configuration.

A BladeSystem c7000 enclosure provides the following benefits:
- With local and remote hardware management integrated across the solution, one full enclosure can be managed as easily as one server.
- Scalable: Management and network interconnects extend scalability beyond a single enclosure, allowing resources to be pooled and shared across multiple enclosures.
- Investment protection: Accommodates multiple server and network designs in one enclosure.
- Lower costs per server, in comparison to rack-mounted servers
- Lower power consumption, in comparison to rack-mounted servers.
- Lower airflow requirements, in comparison to rack-mounted servers

**HPE ProLiant & Integrity Server Blades**

Delivering best-in-class performance, choice and reliability on Intel® Xeon® and Intel® Itanium 2® processors for Windows, Linux, Solaris, or HP-UX based servers; the HPE portfolio of server blades supports a variety of application requirements for scale-out architectures. The HPE BL460c Gen8 and BL860i2 have been certified as NEBS Level 3.

For more information please see:
**https://www.hpe.com/us/en/integrated-systems/bladesystem.html**

# Configuration Information - Factory Integrated Models

**NOTE:** For a complete configuration of the HPE BladeSystem, please do the following:

## Step 1: Select desired model, configuration and quantity of HPE ProLiant server

**NOTE:** For server blade information, please visit: **https://www.hpe.com/us/en/integrated-systems/bladesystem.html**

## Step 2: Determine quantity of HPE BladeSystem c-Class Enclosures to purchase and choose Required Options (One of the following from each list unless otherwise noted):

**NOTE:** Each HPE BladeSystem c-Class Server Blade Enclosure holds up to 16 half-height blades. Server blanks will be shipped in all empty bays.

## Base Server Blade Enclosure Configuration

| | | |
|---|---|---|
| **HPE BladeSystem BLc7000 c-Class Server Blade Enclosures** | HP Integrity BLc7000 CTO Enclosure | AD361D |
| | HP BLc7000 Platinum Configure-to-order Enclosure with ROHS Trial IC Lic | 681844-B21 |
| | **NOTE:** CTO models include 1x Onboard Administrator with KVM, 4x Active Cool 200 Fans and 0x power supplies. | |
| | **NOTE:** The AD361D enclosure is suggested for configurations primarily used with Integrity blades. | |

## Required Options (one of the following from each category unless otherwise noted)

| | | |
|---|---|---|
| **c-Class Power Modules**<br>(1 per enclosure) | HP BLc7000 -48V DC Power Input Module | AH331A |
| **c-Class Power Supply**<br>(Up to 6) | HPE 2250W Performance -48VDC Hot Plug Power Supply Kit | AH332A |
| | **NOTE:** Only compatible with -48V DC Power Input Module. | |
| | HPE 2650W Performance -48VDC Platinum Hot Plug Power Supply Kit | 789934-B21 |
| | **NOTE:** This power supply kit disables HPE Power Discovery Services. | |
| | **NOTE:** Compatible with the HPE BLc7000 -48V DC Power Input Module AH331A. See the "c-Class Power Modules" section above for the power modules. | |
| | HPE 6X 2650W Performance -48VDC Hot Plug FIO Power Supply Kit | 789935-B21 |
| | **NOTE:** This power supply kit disables HPE Power Discovery Services. | |
| | **NOTE:** Compatible with the HPE BLc7000 -48V DC Power Input Module AH331A. See the "c-Class Power Modules" section above for the power modules. | |
| | **NOTE:** Includes a quantity of 6 2650W -48VDC power supplies so a full enclosure can be configured with a single part number. | |
| **c-Class Active Cool Fan**<br>(Up to 6) | HP BLc 6X Active Cool 200 Factory Integrated Fan Option | 517520-B21 |
| | **NOTE:** The bundle includes a quantity of 6 HPE Active Cool 200 Fans so a full enclosure can be configured with a single part number. | |
| | **NOTE:** NEBS Level 3 certification requires 10 fans. | |

## Configuration Information - Factory Integrated Models

## Step 3: Select an optional software bundle (if nothing is selected the enclosure will ship with 16 Insight Control Trial Licenses):

| | | |
|---|---|---|
| **HPE Insight Software** | HPE Insight Control for BladeSystem including 1yr 24x7 Support Enclosure 8-server FIO E-LTU | C6N32ABE |
| | **NOTE:** This license supports HPE ProLiant c-Class blade servers. | |
| | **NOTE:** Must be purchased as an option to an HPE BladeSystem enclosure. FIO can only be ordered as part of a factory-configured platform. Customer will receive a printed license entitlement certificate via physical shipment. | |

## Step 4: Select optional Redundant Onboard Administrator Capability

| | | |
|---|---|---|
| **BL c-Class Infrastructure** | HP BLc7000 Onboard Administrator with KVM Option | 456204-B21 |
| | **NOTE:** Models of the c7000 enclosure (part numbers 507019-B21 and AD361C) come with an Onboard Administrator with KVM as standard. Order this part number (456204-B21) when a second redundant Onboard Administrator is desired for a c7000 enclosure. | |

## Step 5: Select 1 or more interconnect modules for each enclosure

The following is a list of various HPE BladeSystem c-Class interconnect modules (Virtual Connect, Ethernet, and Fibre Channel), which have been tested for NEBS Level 3 compliance. For detailed interconnect options consult the specific interconnect QuickSpecs:
**http://h18004.www1.hp.com/products/blades/components/c-class-interconnects.html**

A pair of interconnects must be ordered if redundancy is required.
**NOTE:** Options for specific c-Class interconnects are NOT included in the list below. Consult the individual interconnect QuickSpecs to obtain part numbers for interconnect options such as cables, SFPs, etc.

| | | |
|---|---|---|
| **HPE BladeSystem c-Class Network Interconnects** | HP Virtual Connect Flex-10/10D Module for c-Class BladeSystem | 638526-B21 |
| | HP Virtual Connect FlexFabric-20/40 F8 Module for c-Class BladeSystem | 691367-B21 |
| | HP Virtual Connect FlexFabric-20/40 F8 Module for c-Class BladeSystem with TAA | 691367-B22 |
| | HP Virtual Connect FlexFabric 10/24 Enterprise Edition BLc7000 Option | 605865-B21 |
| | HP Virtual Connect FlexFabric 10Gb/24-port Module for c-Class BladeSystem | 571956-B21 |
| | HPE 6127XLG Ethernet Blade Switch | 737685-B21 |
| | HP 6127XLG Ethernet Blade Switch for TAA | 787635-B22 |
| | HP 6125G Ethernet Blade Switch | 658247-B21 |
| | HP 6125G/XG Ethernet Blade Switch | 658250-B21 |
| | HP 6120XG Blade Switch | 516733-B21 |
| | Mellanox SX1018HP Ethernet Switch for c-Class BladeSystem | 689638-B21 |
| | HP 10GbE Ethernet Pass-Thru Module for c-Class BladeSystem | 538113-B21 |
| | HP 1GB Ethernet Pass-Thru Module for c-Class BladeSystem | 406740-B21 |
| | HP 4GB Fibre Channel Pass-thru Module for c-Class BladeSystem | 403626-B21 |

## Configuration Information - Factory Integrated Models

| | | |
|---|---|---|
| | HP Virtual Connect 8Gb 24-port Fibre Channel Module for c-Class BladeSystem | 466482-B21 |
| | Brocade 16Gb/16 SAN Switch for BladeSystem c-Class | C8S45A |
| | Brocade 16Gb/28 SAN Switch for BladeSystem c-Class | C8S46A |
| | Brocade 16Gb/28 SAN Switch Power Pack+ for BladeSystem c-Class | C8S47A |
| | Brocade 8/12c SAN Switch for BladeSystem c-Class | AJ820B |
| | Brocade 8/24c Power Pack+ SAN Switch for BladeSystem c-Class | AJ822B |
| **HPE BladeSystem c-Class SAN Interconnect** | Brocade 8/24c SAN Switch for BladeSystem c-Class | AJ821B |
| | HPE Brocade 8/12c SAN Switch Upgrade LTU | A5517B |
| | Brocade 8/24c SAN Switch for BladeSystem c-Class | AJ821B |
| | Brocade 8/24c SAN Switch for BladeSystem c-Class | AJ821B |

| | | |
|---|---|---|
| **HPE BladeSystem Infiniband Interconnect** | HP 4X FDR InfiniBand Managed Switch Module for c-Class BladeSystem | 648311-B21 |
| | HP 4X FDR InfiniBand Switch Module for c-Class BladeSystem | 648312-B21 |

**NOTE:** The HPE BLc FDR IB Switches are only supported on the HPE BladeSystem c7000 Enclosures P/N's: 681840-B21, 681842-B21, 681844-B21, 507014-B21, 507015-B21, 507016-B21, 507017-B21 and 507019-B21.

**NOTE:** Please see the HPE BladeSystem c7000 Enclosure QuickSpecs for additional information at:

**https://www.hpe.com/h20195/v2/GetDocument.aspx?docname=c04229580** (Worldwide)

| | | |
|---|---|---|
| **c7000 Enclosure Options** | HP BLc7000 Onboard Administrator with KVM Option | 456204-B21 |

**NOTE:** Models of the c7000 enclosure (P/Ns 507019-B21: 507015-B21, 507017-B21, 507016-B21, 507014-B21) come with an Onboard Administrator with KVM as standard. Order (P/N 456204-B21) when a second redundant Onboard Administrator is desired for a c7000 enclosure.

| | | |
|---|---|---|
| | HP BLc7000 10000 Series Rack Shipping Bracket Option | 433718-B21 |

**NOTE:** The shipping bracket is required for shipping a c7000 enclosure when installed in a HPE 10000 G2 rack. It is not required for normal operation.

| | | |
|---|---|---|
| | HP c-Class BladeSystem Miscellaneous Blanks Option Kit | 412148-B21 |

**NOTE:** This kit should only be ordered to replace lost or damaged blanks.

| | | |
|---|---|---|
| | HP c-Class BladeSystem Bay Blank with Coupler Option | 412150-B21 |

**NOTE:** The coupler allows half-height server blanks to be coupled together to create a full-height server blank.
**NOTE:** This kit should only be ordered to replace lost or damaged blanks.

## Step 6: Select NEBS certified server blades

| | | |
|---|---|---|
| **HPE Proliant Blade Server** | HP ProLiant BL460c Gen9 E5-v3 10Gb/20Gb FlexibleLOM Configure-to-order Blade Server | 727021-B21 |

**Configurable Model Ships with:**

One (1) FlexibleLOM connector providing a choice for one (1) of the supported 10Gb/20Gb

# Configuration Information - Factory Integrated Models

FlexibleLOMs
Two (2) HPE small form factor hot-plug SAS/SATA/ HDD or SSD hard drive bays
Two (2) x16 PCIe I/O expansion slots
One (1) integrated USB connector and one (1) MicroSDHC connector
One (1) TPM connector
HPE iLO Management (standard)

| | | |
|---|---|---|
| **HPE PCI Expansion Blade** | HP BLc PCI Expansion Blade | 448018-B21 |
| | **NOTE:** Please see the QuickSpecs for Technical Specifications and additional information: **https://www.hpe.com/h20195/v2/GetDocument.aspx?docname=c04123380** | |

| | | |
|---|---|---|
| **HPE Seismic Rack** | HP 36U 1M Seismic Rack | AH343A |

| | | |
|---|---|---|
| **Rack Options for HPE Seismic Rack** | HP c7000 Enclosure Seismic Kit | AH330A |
| | HP Seismic Cabinet Caster Kit | AH336A |
| | HP Seismic Cabinet Concrete Anchor | AH334A |
| | HP Seismic Cabinet Raised Floor Anchor | AH335A |
| | HP BladeSystem Breaker Panel | AH355A |
| | HP BladeSystem c-Class 2.0m Breaker Panel Power Cable | AH392A |
| | HP BladeSystem c-Class 1.3m Breaker Panel Power Cable | AH393A |
| | HP BLc 30 Ampture Breaker Option | AM336A |
| | HP BladeSystem Cable Management Tray | AH394A |

# Fan Bay and Device Bay Numbering and Population Guidelines

## Server Blade and Fan Population Guidelines

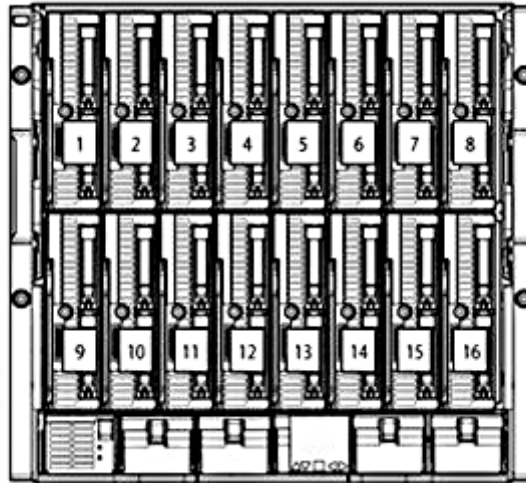**Fan bay numbering**
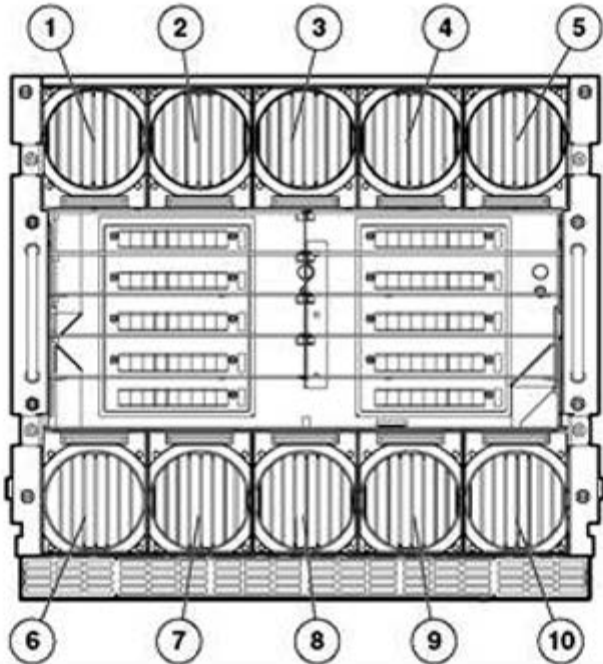


**Fans must be placed in the following bays**

| Number of Fans | Fan Bays Used |
|---|---|
| 4 | 4, 5, 9, 10 |
| 6 | 3, 4, 5, 8, 9, 10 |
| 8 | 1, 2, 4, 5, 6, 7, 9, 10 |
| 10 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 |

**NOTE:** For correct operation fans and server blades must be installed in the correct bays. The Onboard Administrator will ensure that fans and blades are correctly placed before allowing systems to power on.

# Fan Bay and Device Bay Numbering and Population Guidelines

**Half-height server blade bay numbering**



| | |
|---|---|
| 1. Device Bay 1 | 9. Device Bay 9 |
| 2. Device Bay 2 | 10. Device Bay 10 |
| 3. Device Bay 3 | 11. Device Bay 11 |
| 4. Device Bay 4 | 12. Device Bay 12 |
| 5. Device Bay 5 | 13. Device Bay 13 |
| 6. Device Bay 6 | 14. Device Bay 14 |
| 7. Device Bay 7 | 15. Device Bay 15 |
| 8. Device Bay 8 | 16. Device Bay 16 |

**NOTE:** Half-height servers should be populated from top and bottom from left to right from the front of the enclosure. So the first two half-height servers would be placed in bays 1 & 9 the second two half-height servers would be placed in bays 2 & 10 and so on until the enclosure is full.

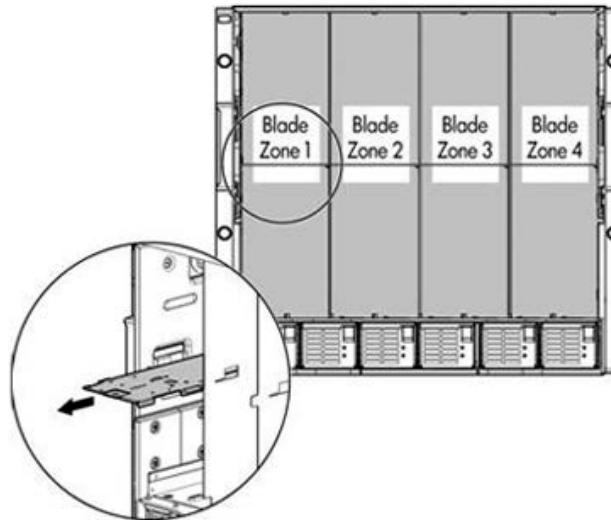# Fan Bay and Device Bay Numbering and Population Guidelines

**Full-height server blade bay numbering**
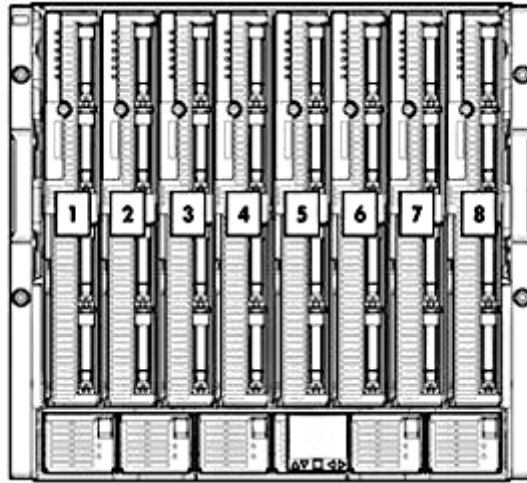


1. Device Bay 1
2. Device Bay 2
3. Device Bay 3
4. Device Bay 4

5. Device Bay 5
6. Device Bay 6
7. Device Bay 7
8. Device Bay 8

**NOTE:** Full-height servers should be populated from left to right.

---

**Mixed Configuration - Full Height and Half-Height Population rules**



The c7000 enclosure is divided into 4 quadrants by the vertical support metalwork. Within each quadrant a removable divider is used to support half height devices. To install a full-height blade in any quadrant this divider must be removed. As a consequence a quadrant can only contain either full-height server blades or half-height server blades.

**NOTE:** Storage blades and Tape blades can be installed in the same quadrant as both full-height and half-height blades, a bracket ships with each SB40c/Tape Blade that allows a half-height blade to be mounted on top of the storage blade.

**NOTE:** The lower tape or storage blade cannot be removed without first removing the upper half height blade.

## Technical Specifications

| HPE BladeSystem c7000 Server Blade Enclosurex | Dimensions | Height | 17.4 in (442 mm) |
| --- | --- | --- | --- |
| | | Width | 17.6 in (447.04 mm) |
| | | Depth | 36.4 in (925 mm) |
| | **Shipping Dimensions** | Height | 29.88 in (759 mm) |
| | | Width | 23.88 in (607 mm) |
| | | Depth | 39.88 in (1013 mm) |
| | **DC Input Enclosure Weight** | Unboxed | 151 lb (68.5 Kg) |
| | | Shipping | 194 lb (88 Kg) |
| | **Max Enclosure Weight** (approximate) | Unboxed | 450 lb (204 Kg) |
| | | Shipping | 493 lb (223.6 Kg) |
| | **Temperature Range** | Operating | 50° to 95° F (10° to 35° C) |
| | | Non-Operating | -22° to 140° F (-30° to 60° C) |
| | **Relative Humidity** | Operating | 10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing. |
| | | Non-Operating | 5 to 95% relative humidity (Rh), 38.7°C (101.7°F)maximum wet bulb temperature, non-condensing. |

**NOTE:** Operating temperature has an altitude derating of 1.8° F (1° C) per 1,000 ft (304.8 m). No direct sunlight. Upper operating limit is 10,000 ft (3,048 m) or 70Kpa/10.1 psia. Upper non-operating limit is 30,000 ft (9,144 m) or 30.3 KPa/4.4 psia. Storage maximum humidity of 95% is based on a maximum temperature of 113° F (45° C). Altitude maximum for storage is 70 KPa.

| Power | **Input Requirements DC Power** | Rated Input Voltage | -36 to -72 VDC |
| --- | --- | --- | --- |
| | | Max Input Current per line cord | 75A |
| | | Max Input Power per line Cord | 2700W |
| | | -48V DC Power | Terminal lug: 45DG 4 AWG ¼ 2H Two-hole lug 45 degree bend 0.25in. (6.4mm) stud hole size 0.63in. (16mm) hole spacing |
| | **Output Specifications (per power supply)** | HPE 2250W -48V DC Hot-Plug Power Supply | 2250W |
| | **Acoustic Noise** | Listed are the declared A-Weighted sound power levels (LWAd) and declared average | |

# Technical Specifications

bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).

**Idle**

| | | |
|---|---|---|
| LWAd | 7.1 Bels |
| LpAm | 54 dB |

**Idle**

| | | |
|---|---|---|
| LWAd | 7.2 Bels |
| LpAm | 54 dB |

| | | | |
|---|---|---|---|
| **Option Kits** | **Power Supply Option Shipping Dimensions** | Height | 8.75 in (223 mm) |
| | | Width | 8.63 in (219 mm) |
| | | Depth | 35.13 in (892 mm) |
| | | Weight | 8.5 lbs (3.85 Kg) |
| | **Fan Option Shipping Dimensions** | Height | 8.75 in (223 mm) |
| | | Width | 9.75 in (248 mm) |
| | | Depth | 15.88 in (403 mm) |
| | | Weight | 4.0 lbs (1.8 Kg) |
| | **Onboard Administrator Option Shipping Dimensions** | Height | 2.50 in (63.5 mm) |
| | | Width | 9.88 in (251 mm) |
| | | Depth | 13.50 in (343 mm) |
| | | Weight | 4.0 lbs (1.8 Kg) |

| | | |
|---|---|---|
| **Environment-friendly Products and Approach** | **End-of-life Management and Recycling** | Hewlett Packard Enterprise offers end-of-life Hewlett Packard Enterprise product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: **http://www.hpe.com/info/recycle**. To recycle your product, please go to: **http://www.hpe.com/info/recycle** or contact your nearest Hewlett Packard Enterprise sales office. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner. |

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site at: **http://www.hpe.com/info/recycle**. These instructions may be used by recyclers and other WEEE treatment facilities as well as HEWLETT PACKARD ENTERPRISE OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

# Power Specifications

**NOTE:** To review maximum system power ratings for facilities planning purposes use the Active Answers Power Calculator which is available via the online tool located at URL:

**https://www.hpe.com/us/en/integrated-systems/rack-power-cooling.html#Portfolio**

## Summary of Changes

| Date | Version History | Action | Description of Change |
|------|-----------------|--------|-----------------------|
| 05-Jul-2016 | From Version 19 to 20 | Changed | Overview, Configuration Information - Factory Integrated Models, and Technical Specifications sections were updated. |
| | | Added | SKUs added in Configuration Information – Factory Integrated Models: 789934-B21, 789935-B21, 727021-B21. |
| | | Removed | SKUs removed from QuickSpecs: 735151-B21, 679118-B21. |
| 11-Mar-2016 | From Version 18 to 19 | Changed | Configuration Information - Factory Integrated Models section was updated. |
| | | Added | SKUs added to QuickSpecs: 691367-B21, 691367-B22, 648311-B21, 648312-B21, 737685-B21, 787635-B22, C8S45A, C8S46A, C8S47A. |
| | | Removed | Obsolete SKUs were deleted: E5Y41AAE, 498358-B21, 410916-B21, 451438-B21, 451439-B21, 641016-B21. |
| 30-May-2016 | From Version17 to 18 | Changed | Sections in QuickSpecs were updated. |
| 19-Jul-2013 | From Version 16 to 17 | Changed | HPE Power Advisor was added and HPE BladeSystem Power Sizer was removed from HPE BladeSystem c-Class Overview Steps 2, 3, 5, and 6 were revised in Storage Acoustic Noise was revised in Power |
| 12-Jul-2013 | From Version 15 to 16 | Changed | Storage: Updated Step 5, HPE BladeSystem c-Class Network Interconnects section. |
| 06-May-2013 | From Version 14 to 15 | Changed | Storage: Updated Step 5, HPE BladeSystem c-Class Network Interconnects section. |
| 05-Apr-2013 | From Version 13 to 14 | Changed | Storage: Updated Note in Step 2, Updated HPE BladeSystem c-Class Network interconnects and HPE BladeSystem c-Class SAN Interconnect sections in Step 5, completely Updated Step 6 and updated Rack Options for HPE Seismic Rack. |
| 06-Jan-2012 | From Version 12 to 13 | Added | HPE Virtual Connect FlexFabric 10GB/24-port Module for c-Class BladeSystem was added to HPE BladeSystem c-Class Network Interconnects HPE NC532m Dual Port 10GbE Multifunction BL-c Adapter, HPE NC550m 10Gb 2-port PCIe x8 Flex-10 Ethernet Adapter, HPE NC551m Dual Port FlexFabric 10Gb Converged Network Adapter and HPE NC553m 10Gb 2-port FlexFabric Adapter were added to Mezzanine Options HPE 600GB 6G SAS 10K SFF DP ENT HDD, HPE 450GB 6G SAS 10K SFF DP ENT HDD and HPE 120GB 3G SATA SFF (2.5 inch) ENT Perf 3yr Warranty Solid State Drive were added to Hard Drives |
| 29-Jul-2011 | From Version 11 to 12 | Changed | HPE BladeSystem c-Class Network Interconnects was revised in Step 5 and HPE BL460c G6 was revised in Step 6. |
| 23-Mar-2011 | From Version 10 to 11 | Changed | Correction made to two part numbers in Step 6. |
| 28-Jan-2011 | From Version 9 to 10 | Removed | Removed part number 572018-B21 from Step 5 of the Storage section. |
| 13-Aug-2010 | From Version 8 to 9 | Changed | Changes made in the Storage and Technical Specifications sections. |
| 26-Jul-2010 | From Version 7 to 8 | Changed | Description and part number changes made in the interconnect section. |
| 14-May-2010 | From Version 6 to 7 | Changed | Changes made within the Overview, Storage and Technical Specifications sections. |

## Summary of Changes

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|---|---|---|---|
| 16-Apr-2010 | From Version 5 to 6 | Changed | Part number was changed for HPE -48VDC 30 amp breaker for AH335A in Rack Options for HPE Seismic Rack. |
| 02-Apr-2010 | From Version 4 to 5 | Removed | Removed part number 399593-B22 from Step 5. |
| 05-Feb-2010 | From Version 3 to 4 | Added | Added the NC382m to the tested NICs list. |
| 05-Jan-2010 | From Version 2 to 3 | Changed | Corrected the description for part number 455880-B21 in Step 5. |

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