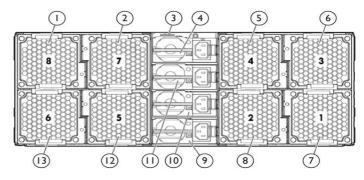
#### Overview

The HP ProLiant s6500 chassis can accommodate up to eight half-width or four full width servers gives you the ability to mix and match server nodes, and also allows for single node serviceability (SNS)-making it an extremely flexible chassis. This, in other words, means that you can add or remove compute capacity based on your business needs. The highly efficient multi-node chassis with shared power and cooling components, including energy efficient fans and optional hot-plug redundant PSU helps reduce power consumption when compared to previous generation servers.

| 4 | 8 | OÜ             |
|---|---|----------------|
| 3 | 7 |                |
| 2 | 6 | $\bigcirc\Box$ |
| 1 | 5 |                |



#### **Front View:**

- 1. Server Bay 1
- 2. Server Bay 2
- 3. Server Bay 3
- 4. Server Bay 4
- 5. Server Bay 5
- 6. Server Bay 6
- 7. Server Bay 7
- 8. Server Bay 8

#### **Back View:**

- 1. Fan 8
- 2. Fan 7
- 3. SL-APM interface
- 4. Power supply 4
- 5. Fan 4
- 6. Fan 3
- 7. Fan 1
- 8. Fan 2
- 9. Power Supply 1
- 10. Power Supply 2
- 11. Power Supply 3
- 12. Fan 5
- 13. Fan 6

#### **What's New**

Updating supported options

#### Standard Features

Non-redundant model **System Fans** 

Redundant model

NOTE: all 8 fan bays must be populated with either redundant or non-redundant fans

**NOTE:** mixing and matching of fans is not supported

HP ProLiant s6500 Chassis - 4U Form Factor

This product is covered by a global limited warranty and supported by HP Services and a worldwide Warranty network of HP Authorized Channel Partners. Hardware diagnostic support and repair is available for one year from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HP Care Pack services or customized

service agreements. Hard drives have either a one year or three year warranty.

NOTE: Server Warranty includes 1 year Parts, 1 year Labor, 1-year on-site support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have HP replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:

http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html.

### for Servers and Storage

Factory Express Portfolio HP Factory Express offers configuration, customization, integration and deployment services for HP servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed.

> Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. HP products supported through Factory Express include a wide array of servers and storage: HP Integrity, HP ProLiant, HP ProLiant Server Blades, HP BladeSystem, HP 9000 servers as well as the MSAxxxx, VA7xxx, EVA, XP, rackable tape libraries and configurable network switches.

For more information on Factory Express services for your specific server model please contact your sales representative or go to: http://www.hp.com/go/factory-express.



### Service and Support

#### **Service and Support**

#### HP Technology Services for Industry Standard Servers and BladeSystem

Capitalizing on HP ProLiant server and HP BladeSystem capabilities requires a service partner who understands your increasingly complex business technology environment. That's why it makes sense to team up with the people who know HP infrastructure hardware and software best - the experienced professionals at HP Services.

#### What HP ProLiant and BladeSystem Services can do for you

HP ProLiant and BladeSystem Services can help you design, deploy, test, integrate, support, and manage IT and infrastructure solutions. This way, HP proposes services solutions that include more than just uplift of base warranty. You can get the support you need by choosing from one of a number of service packaged solutions we have designed to address wider set of customer support needs.

HP Technology Services meets business challenges with services offered in three packages - **Optimized Care Package, Standard Care Package, and Basic Care Package** - available for each product group. Such packaged solutions enable customers to optimize technology operations, minimize risk and drive better business outcomes with easy-to-buy, easy-to-use scalable support packages for servers, storage, networking and software.

#### **Optimized Care**

#### Optimized Care Package: Supports maintaining servers at optimum performance availability

#### **HP ProLiant Server Hardware Installation**

Provides for the basic hardware installation of HP branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner <a href="http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN">http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN</a>

#### **HP Installation and Startup for Insight Control Software**

Provides for the deployment and basic configuration of HP Insight Control on HP ProLiant ML and DL series servers or HP BladeSystem servers

http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA0-9972ENW.pdf

#### 3-Year HP Critical Advantage

Provides end-to-end infrastructure support solution for business critical applications running on virtualized/x86 infrastructures, enabling the customers to cost effectively build, operate, and continuously improve their IT environment

http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=4AA3-1772ENW

**Additional Services:** Data Center Transformation Service



#### Service and Support

#### **Standard Care**

#### Standard Care Package: Package that maintains high level of server availability

#### **HP ProLiant Server Hardware Installation**

Provides for the basic hardware installation of HP branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN

#### **HP Installation and Startup for Insight Control Software**

Provides for the deployment and basic configuration of HP Insight Control on HP ProLiant ML and DL series servers or HP BladeSystem servers

http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA0-9972ENW.pdf

#### 3-Year HP 6 hour Hardware Support Onsite Call-to-Repair Service

Provides an IT manager with a team of support specialists who will quickly begin troubleshooting the system to help return the hardware to operating condition within 6 hours of the initial service request to the HP Global Solution Center

http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-6636ENN

#### 3-Year , HP 24x7 Software Support for Insight Control

Provides for the deployment and basic configuration of HP Insight Control on HP ProLiant ML and DL series servers or HP BladeSystem servers

http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-6645EEE.pdf

**Additional Services**: Software OS (Microsoft, Linux (SUSE/Red Hat) & VMware Installation & Start Up and Software Support); Microsoft or Linux or VMware education courses; +60 Proactive Select Credits

#### **Basic Care**

#### Basic Care Package: delivers minimum recommended support service level

#### **HP ProLiant Server Hardware Installation**

Provides for the basic hardware installation of HP branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN

#### **HP Installation and Startup for Insight Control Software**

Provides for the deployment and basic configuration of HP Insight Control on HP ProLiant ML and DL series servers or HP BladeSystem servers

http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA0-9972ENW.pdf

#### 3-Year HP 24x7 4 hour Response, Hardware Support Onsite Service

Provides for the deployment and basic configuration of HP Insight Control on HP ProLiant ML and DL series servers or HP BladeSystem servers

http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA0-9972ENW.pdf

#### 3-Year, HP 24x7 Software Support for Insight Control

Provides for the deployment and basic configuration of HP Insight Control on HP ProLiant ML and DL series servers or HP BladeSystem servers

http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-6645EEE.pdf

Additional Services: Software OS (Microsoft, Linux (SUSE/Red Hat) & VMware Installation & Start Up and



### **Service and Support**

Software Support); +30 Proactive Select Credits, Factory Express

#### **Insight Remote Support**

The packages include HP Insight Remote Support that uses proven technology to deliver secure, reliable 24x7 remote monitoring, diagnoses, and problem resolution. It is available at no additional cost to all warranty, HP Care Pack Service, and service agreement customers.

#### For more information

To learn more on HP ProLiant servers and HP BladeSystem servers, please contact your HP sales representative or HP Authorized Channel Partner. Or visit: http://www.hp.com/services/proliant



### **Pre-configured Models**

### s6500 SL Server Support

| Server Nodes | HP ProLiant SL230s Gen8 1U Left Half Width Tray Configure-to-order Server            | 650047-B21 |
|--------------|--|------------|
|              | HP ProLiant SL230s Gen8 1U Right Half Width Tray Configure-to-order Server           | 650048-B21 |
|              | HP ProLiant SL250s Gen8 2U PCIe Gen3 Left Half Width Tray Configure-to-order Server  | 698723-B21 |
|              | HP ProLiant SL250s Gen8 2U PCIe Gen3 Right Half Width Tray Configure-to-order Server | 698724-B21 |
|              | HP SL250s Gen8 Ivb Lft Tray Node Server  | 750349-B21 |
|              | HP SL250s Gen8 Ivb Rht Tray Node Server  | 750350-B21 |
|              | HP ProLiant SL270s Gen8 1U Left Half Width Tray Configure-to-order Server            | 654947-B21 |
|              | HP ProLiant SL270s Gen8 1U Right Half Width Tray Configure-to-order Server           | 654948-B21 |
|              | HP ProLiant SL270s Gen8 SE 4U Left Tray Configure-to-order Server                    | 739055-B21 |
|              | HP ProLiant SL270s Gen8 SE 4U Right Tray Configure-to-order Server                   | 739056-B21 |

# Pre-configured Models HP ProLiant s6500 chassis

HP ProLiant s6500 3/1200 Power Supply

**Redundant Fan Chassis** 

629236-B21

Fans

(3) 1200W (94% efficient) Platinum Plus Hot Plug Power Supplies

(8) hot plug redundant fans

Form Factor 4U chassis

**Tray blank** 1 right and 1 left tray blank

**Power supply blanks** 1 power supply blank

HP ProLiant s6500 2/1200 Power Supply

Non Redundant Fan Chassis

629235-B21

. onc. supply

(2) 1200W (94% efficient) Platinum Plus Hot Plug Power Supplies

Fans (8) hot plug non-redundant fans

Form Factor 4U chassis

Tray blank 1 right and 1 left tray blank
Power supply blanks 2 power supply blank



### **Pre-configured Models**

### S6500 tray mixing support plan

**NOTE:** s6500 is a 4U chassis and has a left and a right side when using  $\frac{1}{2}$  width trays.

**NOTE:** The picture below show how each half of the chassis can be configured.

**NOTE:** A full width tray uses the entire width of the chassis

**NOTE:** Mixing and matching of half width trays is supported.

NOTE: Mixing and Matching of Full width trays is supported

**NOTE:** Mixing and matching of Full and half width trays is NOT supported.

**NOTE:** 2U half width tray is NOT supported in middle 2 bays.

| 1 | П | F | ull | I۷ | lid | lth |
|---|---|---|-----|----|-----|-----|
|   |   |   |     |    |     |     |

| 1U ½ Width |  |
|------------|--|
| 1U ½ Width |  |
| 1U ½ W     |  |
| 1U ½ W     |  |

| 2U 1/2 W |  |
|----------|--|
| 2U 1/2 W |  |

| 1U ½ W |  |
|--------|--|
| 1U ½ W |  |
| 2U ½ W |  |

| 2U 1⁄2 W |  |
|----------|--|
| 1U ½ W   |  |
| 1U ½ W   |  |

4U ½ W

### Configuration Information - Factory Integrated Models

**NOTE:** This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

**NOTE:** FIO indicates that this option is only available as a factory installable option.

| Sten 1. Base | Configuration | (choose one fro | m each list unle     | ss otherwise noted)    |
|--------------|---------------|-----------------|----------------------|------------------------|
| JICH I. DUJE | Communication | いいいひろと ひにと ここひ  | III CALII IIJI UIIIC | 33 ULIICI WI3C IIULCU/ |

**HP Chassis**HP ProLiant s6500 without Fans 4U Configure-to-order Chassis **NOTE:** You must choose Power Supplies and fans as the chassis does not include them.

**HP Chassis Fans** HP s6500 Non Redundant Fan Kit 617858-B21

**NOTE:** This kit includes only 1 fan

**NOTE:** This selection must be ordered in quantities of 8.

HP s6500 Redundant Fan Kit 617856-B21

**NOTE:** This kit includes only 1 fan

**NOTE:** This selection must be ordered in quantities of 8.

HP Tray Blanks HP s6500 Half Width Node Left Blank Kit 688928-B21

**NOTE:** Node blank is needed when not completely filling s6500 chassis and when

servicing a node.

HP s6500 Half Width Node Right Blank Kit 688930-B21

**NOTE:** Node blank is needed when not completely filling s6500 chassis and when

servicing a node.

**HP Power Supplies NOTE:** Mixing of power supplies in the same chassis is not supported. All power supplies

inside a server must be exactly the same model. Mixing Gold, Platinum, and Platinum

Plus certified power supplies is not supported.

**NOTE:** Prior to making a power supply selection it is highly recommended that the HP

Power Advisor is run to determine the right size power supply for your server

configuration. The HP Power Advisor is located at: www.hp.com/go/hppoweradvisor.

**NOTE:** Choose correct power supply from list below depending on generation of server.

#### **HP Common Slot Platinum Plus Power Supply Kits**

**NOTE:** These power supplies support Gen8 servers.

HP 750W Common Slot Platinum Plus Hot Plug Power Supply Kit 656363-B21
HP 1200W Common Slot Platinum Plus Hot Plug Power Supply Kit 656364-B21

HP 1500W Common Slot Platinum Plus Hot Plug Power Supply Kit

**HP Common Slot Platinum Power Supplies** 

**NOTE:** This Power Supply supports G6 and G7 servers.

HP 1200W Common Slot Platinum Hot Plug Power Supply Kit 578322-B21

**HP Common Slot Gold Power Supplies** 

**NOTE:** This Power Supply supports G6 and G7 servers.

HP 750W Common Slot Gold Hot Plug Power Supply Kit 512327-B21

**HP Common Slot 277VAC Power Supplies** 

**NOTE:** 94% efficiency.

HP 1200W Common Slot 277VAC Hot Plug Power Supply Kit 717359-B21

NOTE: The 1200W Common Slot 277VAC Hot Plug Power Supply Kit does not include a

power cord.



684532-B21

### **Configuration Information - Factory Integrated Models**

**HP Common Slot 380VDC Power Supplies** 

NOTE: 94% efficiency.

HP 1200W Common Slot 380VDC Hot Plug Power Supply Kit

684539-B21

**NOTE:** Power Specification and Technical Content for supported power supplies can be

found at:

http://h18000.www1.hp.com/products/quickspecs/14209\_div/14209\_div.html

#### **Step 2: Choose Additional Options for Factory Integration**

**NOTE:** For additional options, please refer to the "Additional Options" section below.

**HP Power Supplies** 

**NOTE:** Mixing of power supplies in the same chassis is not supported. All power supplies inside a server must be exactly the same model. Mixing Gold, Platinum, and Platinum Plus certified power supplies is not supported.

**NOTE:** Prior to making a power supply selection it is highly recommended that the HP Power Advisor is run to determine the right size power supply for your server configuration. The HP Power Advisor is located at: www.hp.com/go/hppoweradvisor. **NOTE:** Choose correct power supply from list below depending on generation of server.

#### **HP Common Slot Platinum Plus Power Supply Kits**

**NOTE:** This Power Supply supports Gen8 servers.

| HP 750W Common Slot Platinum Plus Hot Plug Power Supply Kit  | 656363-B21 |
|--|------------|
| HP 1200W Common Slot Platinum Plus Hot Plug Power Supply Kit | 656364-B21 |
| HP 1500W Common Slot Platinum Plus Hot Plug Power Supply Kit | 684532-B21 |

#### **HP Common Slot Platinum Power Supplies**

**NOTE:** This Power Supply supports G6 and G7 servers.

HP 1200W Common Slot Platinum Hot Plug Power Supply Kit 578322-B21

#### **HP Common Slot Gold Power Supplies**

**NOTE:** This Power Supply supports G6 and G7 servers.

HP 750W Common Slot Gold Hot Plug Power Supply Kit 512327-B21

#### **HP Common Slot 277VAC Power Supplies**

NOTE: 94% efficiency.

HP 1200W Common Slot 277VAC Hot Plug Power Supply Kit 717359-B21

**NOTE:** The 1200W Common Slot 277VAC Hot Plug Power Supply Kit does not include a

power cord.

**HP Common Slot 380VDC Power Supplies** 

NOTE: 94% efficiency.

HP 1200W Common Slot 380VDC Hot Plug Power Supply Kit 684539-B21

**NOTE:** Power Specification and Technical Content for supported power supplies can be

found at:

http://h18000.www1.hp.com/products/quickspecs/14209 div/14209 div.html



#### **Additional Options**

**NOTE:** Some options may not be integrated at the factory. To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Contact your local sales representative for additional information.

#### HP SL Advanced Power Manager

The SL Advanced Power Manager is an optional rack level solution for the HP ProLiant SL4540 and SL4545 which enables server-level DC (or hardware) power on and off and server-level monitoring. In addition, the SL APM will automatically discover SL hardware components which are connected into the SL APM solution.

The SL APM does not replace rack PDUs, but is designed to enable the utilization of basic, low cost, rack PDUs while providing the functionality of 'switched' PDUs which provide hardware power on/off of individual servers by turning off the AC power to the power supplies of a given server. Because the SL servers share power supplies to optimize power efficiency, using 'switched' PDUs to turn off the power supplies in the chassis will result in the loss of all servers in that chassis. The SL APM solves this by allowing server-level hardware power on/off of the DC power to the individual server motherboards.

| UD 1 2M 40U DC Day you Cable 16th                    | 455074     |
|--|------------|
| HP SL Advanced Power Manager Distribution Module Kit | 620002-B21 |
| HP SL Advanced Power Manager Kit                     | 538084-B21 |

#### **DC Power Cable Kits**

| HP 1.3M 48V DC Power Cable Kit  | A5S97A |
|---|--------|
| HP 2.5M 48V DC Power Cable Kit  | A5S98A |
| <b>NOTE:</b> These power cord options are for use with the HP 750W Common Slot -48VDC |        |
| Hot Plug Power Supply Kit (636673-B21). A5S98A  |        |
| HP T-latch Double Ended WW 18AWG DC 2m Jumper Cord                                    | D4J67A |
| NOTE: This power cord option is for use with the HP 1200W Common Slot 380VDC Hot      |        |
| Plug Power Supply Kit (684539-B21).   |        |

#### **HP Power Cords**

### **NOTE:** HP ProLiant servers ships with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs).

| HP C13 - C14 WW 250V 10A Gray 0.7m Jumper Cord         | AOK03A |
|--|--------|
| , ·  |        |
| HP C13 - C14 WW 250V 10A Gray 1.37m Jumper Cord        | A0K04A |
| HP C13 - SEV 1011 CH 250V 10Amp 1.83m Power Cord       | AF565A |
| HP C13 - DK-2.5A DK 250V 10Amp 1.83m Power Cord        | AF566A |
| HP C13 - CEE-VII EU 250V 10Amp 1.83m Power Cord        | AF568A |
| HP C13 - SI-32 IL 250V 10Amp 1.83m Power Cord          | AF564A |
| HP C13 - NBR-14136 BR 250V 10Amp 1.83m Power Cord      | AF591A |
| HP C13 - BS-1363A UK/HK/SG 250V 10Amp 1.83m Power Cord | AF570A |
| HP C13 - CEI-23-50 IT/CL 250V 10Amp 1.83m Power Cord   | AF571A |
| HP C13 - C14 WW 250V 10Amp 2.0m Jumper Cord            | A0K02A |
| HP C13 - IS-1293 IN 250V 10Amp HV 2.5m Power Cord      | SG579A |
| HP C13 - AS3112-3 AU 250V 10Amp 2.5m Power Cord        | AF569A |
| HP C13 - SABS-164 ZA 250V 10Amp 2.5m Power Cord        | AF567A |
| HP C13 - JIS C8303 JP 100V 12Amp 2.0m Power Cord       | AF572A |
| HP C13 - C14 WW 250V 10A Gray 3.0m Jumper Cord         | A0K06A |
|  |        |

| Additional Options       |  |        |
|--------------------------|--|--------|
|                          | HP C13 - Nema 6-15P US 250V 15A JP 3.6m Power Cord   | AON33A |
|                          | HP C13 - GB-1002 CN 250V 10Amp 1.83m Power Cord  | AF557A |
|                          | HP C13 - KSC- 8305 KR 250V 10Amp 1.83m Power Cord  | AF560A |
|                          | HP C13 - CNS-690 TW 110V 13Amp 1.83m Power Cord  | AF561A |
|                          | HP C13 - Nema 5-15P TH/PH 250V 10Amp 1.83m Power Cord  | AF559A |
|                          | HP C13 - Nema 5-15P US/CA 110V 10Amp 1.83m Power Cord  | AF556A |
|                          | HP C13 - IS-1293 IN 240V 6Amp LV 2.0m Power Cord   | AF562A |
|                          | HP C13 - IRAM -2073 AR 250V 10A 2.5m Power Cord  | AF558A |
|                          | HP C13 - C14 WW 250V 10Amp Flint Gray 2.0m Jumper Cord   | AF573A |
| HP Tape Backup           | <b>NOTE:</b> For the complete range of tape drives, autoloaders, libraries and media see: http://www.hp.com/go/tape. For hardware and software compatibility of HP tape backup products see: http://www.hp.com/storage/SPOCK |        |
|                          | HP StoreEver LTO-6 Ultrium 6250 Tape Drive in 1U Rack-mount Kit  | COL99A |
|                          | HP 1/8 G2 LTO-6 Ult 6250 FC Autoloader   | C0H19A |
| HP Tape Storage Systems  | HP StoreEver MSL6480   |        |
|                          | HP StoreEver MSL6480 Scalable Base Module  | QU625A |
|                          | NOTE: Please see the QuickSpecs for Technical Specifications and additional information:<br>http://h18000.www1.hp.com/products/quickspecs/14604_div/14604_div.html (Worldwide)   |        |
| HP Disk Storage Systems  | Disk Enclosures  |        |
| 2.0 2.0                  | HP D2600 w/12 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 48TB Bundle  | E7W32A |
|                          | NOTE: Please see the QuickSpecs for Technical Specifications and additional information:   |        |
|                          | http://h18000.www1.hp.com/products/quickspecs/13404_div/13404_div.html (Worldwide)   |        |
| HP Uninterruptible Power | HP Rack-mountable UPS  |        |
| Systems                  | HP R1500 G3 Uninterruptible Power Supply (UPS)   |        |
|                          | HP R1.5kVA G3 1U INTL Uninterruptible Power System   | AF471A |
|                          | HP R1.5kVA G3 1U JP/TW Uninterruptible Power System  | AF470A |
|                          | HP R1.5kVA G3 1U NA Uninterruptible Power System   | AF469A |
|                          | NOTE: Please see the QuickSpecs for additional information:<br>http://h18000.www1.hp.com/products/quickspecs/14059_div/14059_div.html (Worldwide)  |        |
|                          | HP R/T3000 G2 Uninterruptible Power System (UPS)   |        |
|                          | HP R/T3000 G2 2U Detachable Cord High Voltage INTL Uninterruptible Power System  | AF468A |
|                          | HP R/T3000 G2 2U L530 Low Voltage NA/JP Uninterruptible Power System   | AF466A |



#### Additional Options

HP R/T3000 G2 2U L620 High Voltage NA/JP Uninterruptible Power System

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/14058\_div/14058\_div.html
(Worldwide)

#### **R5000 Uninterruptible Power System (UPS)**

HP R5KVA 3U IEC309-32A High Voltage INTL Uninterruptible Power SystemAF461AHP R5KVA 3U L630 High Voltage NA/JP Uninterruptible Power SystemAF460A

**NOTE:** Please see the QuickSpecs for additional information: http://h18000.www1.hp.com/products/quickspecs/14109\_div/14109\_div.html (Worldwide)

#### **R7000 Uninterruptible Power System (UPS)**

HP R7KVA 4U 50A High Voltage NA/JP Uninterruptible Power System

AF462A
HP R7KVA 4U IEC-32A High Voltage INTL Uninterruptible Power System

AF463A

**NOTE:** Please see the QuickSpecs for additional information: http://h18000.www1.hp.com/products/quickspecs/14110\_div/14110\_div.html (Worldwide)

**NOTE:** For additional information on sizing your HP UPS, please reference: http://www.upssizer.com

**NOTE:** Please see the UPS and PDU cable matrix's on the HP Power Protection and Management page. Under Power Cords, click on the "HP Power Cord Matrix" link. That link will list cable descriptions, requirements, and specifications for UPS and PDU units. Please see the following link: www.hp.com/products/powercords.

**NOTE:** For additional information on HP Uninterruptible Power Systems please go to: www.hp.com/servers/rackups.

#### HP Basic Power Distribution Units (bPDU)

#### **HP Basic Power Distribution Unit: 1U/0U Version** HP 1.9kVA 120 Volt 12 Outlet NA/JP Basic Power Distribution Unit H5M54A HP 3.6kVA 200-240 Volt 12 Outlet WW Basic Power Distribution Unit H5M56A **HP Basic Power Distribution Unit: Half Height Version** HP 2.8kVA 120 Volt 18 Outlet NA/JP Basic Power Distribution Unit H5M55A HP 3.6kVA 200-240 Volt 20 Outlet WW Basic Power Distribution Unit H5M57A HP 4.9kVA 208 Volt 20 Outlet NA/JP Basic Power Distribution Unit H5M58A HP 7.3kVA 230 Volt 20 Outlet INTL Basic Power Distribution Unit **H5M68A** HP 8.6kVA 208 Volt Three Phase 18 Outlet NA/JP Basic Power Distribution Unit H5M61A **HP Basic Power Distribution Unit: Mid Height Version** HP 4.9kVA 208 Volt 30 Outlet NA/JP Basic Power Distribution Unit H5M59A HP 7.3kVA 230 Volt 30 Outlet INTL Basic Power Distribution Unit H5M70A HP 8.3kVA 208 Volt 36 Outlet NA/JP Basic Power Distribution Unit H5M60A HP 11kVA 230 Volt 36 Outlet INTL Basic Power Distribution Unit H5M71A HP Hardwired 200-240 Volt 36 Outlet WW Basic Power Distribution Unit H5M75A HP 5.7kVA 208 Volt Three Phase 27 Outlet NA/JP Dual Voltage Basic Power Distribution H5M63A Unit



### **Additional Options**

| HP 8.6kVA 208 Volt Three Phase 30 Outlet NA/JP Dual Voltage Basic Power Distribution Unit  | H5M64A |
|--|--------|
| HP 8.6kVA 208 Volt Three Phase 30 Outlet NA/JP Basic Power Distribution Unit   | H5M62A |
| HP 11kVA 400 Volt Three Phase 30 Outlet INTL Basic Power Distribution Unit   | H5M72A |
| HP Basic Power Distribution Unit: Full Height Version  |        |
| HP 11kVA 400 Volt Three Phase 42 Outlet INTL Basic Power Distribution Unit   | H5M73A |
| HP 11kVA 400 Volt Three Phase 42 Outlet NA Basic Power Distribution Unit   | H5M67A |
| HP Basic Power Distribution Unit: 480/277 Volt Version   |        |
| HP 13.2kVA 480 Volt Three Phase 15 Outlet NA Basic Power Distribution Unit   | H3X07A |
| HP 19.9kVA 480 Volt Three Phase 30 Outlet NA Basic Power Distribution Unit   | H3X08A |
| HP 800VA - 277V Input / 230V Output NA Rack Mount Transformer  | H3X09A |
| <b>NOTE:</b> Please see the QuickSpecs for Technical Specifications and additional information:  |        |
| http://h18000.www1.hp.com/products/quickspecs/14557_div/14557_div.html (Worldwide)   |        |
| <b>NOTE:</b> Additional HP Power Distribution Units are available. For a complete list of all HP PDUs and additional information please visit: www.hp.com/go/rackandpower. |        |

HP Remote Monitoring Power Distribution Units (mPDU)

| HP Remote Monitored Power Distribution Unit: 1U Version                                       |        |
|---|--------|
| HP 2.8kVA 120 Volt 12 Outlet NA/JP Monitored Power Distribution Unit                          | D9N43A |
| HP 3.6kVA 200-240 Volt 12 Outlet WW Monitored Power Distribution Unit                         | D9N46A |
| HP 4.9kVA 208 Volt 12 Outlet NA/JP Monitored Power Distribution Unit                          | D9N44A |
| HP Remote Monitored Power Distribution Unit: Half Height Version                              |        |
| HP 3.6kVA 200-240 Volt 16 Outlet WW Monitored Power Distribution Unit                         | D9N45A |
| HP Remote Monitored Power Distribution Unit: Mid Height Version                               |        |
| HP 4.9kVA 208 Volt 24 Outlet NA/JP Monitored Power Distribution Unit                          | D9N47A |
| HP 7.3kVA 230 Volt 24 Outlet INTL Monitored Power Distribution Unit                           | D9N48A |
| HP 8.6kVA 208 Volt Three Phase 21 Outlet NA/JP Monitored Power Distribution Unit              | D9N51A |
| HP 5.7kVA 208 Volt Three Phase 21 Outlet NA/JP Dual Voltage Monitored Power Distribution Unit | D9N52A |
| HP 8.6kVA 208 Volt Three Phase 24 Outlet NA/JP Dual Voltage Monitored Power Distribution Unit | D9N53A |
| HP 11kVA 400 Volt Three Phase 21 Outlet INTL Monitored Power Distribution Unit                | D9N55A |
| HP Remote Monitored Power Distribution Unit: Full Height Version                              |        |
| HP 8.3kVA 208 Volt 33 Outlet NA Monitored Power Distribution Unit                             | D9N49A |
| HP 7.3kVA 230 Volt 36 Outlet INTL Monitored Power Distribution Unit                           | D9N50A |
| HP 11kVA 400 Volt Three Phase 33 Outlet INTL Monitored Power Distribution Unit                | D9N57A |
| HP 14.4kVA 208 Volt Three Phase 24 Outlet NA Monitored Power Distribution Unit                | D9N58A |
| HP 16.6kVA 400 Volt Three Phase 33 Outlet NA Monitored Power Distribution Unit                | D9N61A |
| HP 17.3kVA 208 Volt Three Phase 27 Outlet NA/JP Monitored Power Distribution Unit             | D9N54A |
| HP 17.3kVA 208 Volt Three Phase 24 Outlet NA/JP Monitored Power Distribution Unit             | D9N59A |



### **Additional Options**

| HP 22kVA 400 Volt Three Phase 24 Outlet INTL Monitored Power Distribution Unit | D9N60A |
|--|--------|
| HP 22kVA 400 Volt Three Phase 33 Outlet INTL Monitored Power Distribution Unit | D9N56A |
| HP 16.6kVA 400 Volt Three Phase 24 Outlet NA Monitored Power Distribution Unit | D9N62A |
| HP 19.9kVA 480 Volt Three Phase 30 Outlet NA Monitored Power Distribution Unit | D9N63A |
| HP Environmental Sensor for Remote Monitored PDUs                              |        |
| HP Environmental Sensor for Remote Monitored PDUs                              | E2D53A |
| <b>NOTE:</b> Please see the QuickSpecs for additional information:             |        |
| http://h18000.www1.hp.com/products/quickspecs/14669_div/14669_div.html         |        |
| (Worldwide)  |        |

## HP Intelligent Power Distribution Units (iPDU)

#### **iPDU** Core Units

| AF520A<br>AF521A |
|------------------|
| AF521A           |
|                  |
| AF522A           |
| AF533A           |
| AF523A           |
| AF902A           |
| AF525A           |
| AF526A           |
| AF527A           |
| AF535A           |
| AF537A           |
| AF538A           |
|                  |
| AF531A           |
| AF532A           |
| AF534A           |
|                  |
| AF547A           |
| AF528A           |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |

**HP Rail Kits** HP s6500 4U Chassis 598109-B21



### **Additional Options**

| HP Rack Series  | <b>HP Intelligent Series Rack</b> |
|-----------------|-----------------------------------|
| III NACK SCIICS | III IIICCKIGCIIC SCIICS NACK      |

| HP 636 1200mm Pallet Intelligent Series Rack | BW899A |
|--|--------|
| HP 636 1200mm Shock Intelligent Series Rack  | BW900A |
| HP 642 1200mm Pallet Intelligent Series Rack | BW907A |
| HP 642 1200mm Shock Intelligent Series Rack  | BW908A |
| HP 647 1200mm Pallet Intelligent Series Rack | BW913A |
| HP 647 1200mm Shock Intelligent Series Rack  | BW914A |

 $\textbf{NOTE:} \ Please \ see \ the \ Quick Specs \ for \ Technical \ Specifications \ such \ as \ height, \ width,$ 

depth, weight, and color:

http://h18000.www1.hp.com/products/quickspecs/14223\_div/14223\_div.html

(Worldwide)

NOTE: For additional information regarding Rack Cabinets, please see the following

URL: http://www.hp.com/go/rackandpower.

#### HP Rack Options HP TFT7600 G2 KVM Console Rackmount Keyboard Monitor

| HP TFT7600 G2 KVM Console Rackmount Keyboard US Monitor     | AZ870A |
|---|--------|
| HP TFT7600 G2 KVM Console Rackmount Keyboard UK Monitor     | AZ871A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard DE Monitor     | AZ872A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard FR Monitor     | AZ873A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard IT Monitor     | AZ874A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard ES Monitor     | AZ875A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard DK Monitor     | AZ876A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard NO Monitor     | AZ877A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard SE/FI Monitor  | AZ878A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard CH Monitor     | AZ879A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard PT Monitor     | AZ880A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard BE Monitor     | AZ881A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard JP Monitor     | AZ882A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard RU Monitor     | AZ883A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard Intl Monitor   | AZ884A |
| HP TFT7600 G2 KVM Console Rackmount Keyboard US TAA Monitor | AZ885A |

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13731\_div/13731\_div.html (Worldwide)

#### **HP Server Console Switches**

| HP Server Console 0x2x8 Port Analog Switch  | AF616A |
|---|--------|
| HP Server Console 0x2x16 Port Analog Switch | AF617A |
| HP TAA 0x2x16xKVM Server Console G2 Switch  | AF626A |



#### Additional Options

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/11834\_div/11834\_div.html (Worldwide)

#### **HP Server Console Switch G2 with Virtual Media & CAC**

| HP 0x2x16 KVM Server Console Switch G2 with Virtual Media CAC Software | AF618A     |
|--|------------|
| HP 0x2x32 KVM Server Console Switch G2 with Virtual Media CAC Software | AF619A     |
| HP KVM CAT5 1-pack USB Interface Adapter                               | 336047-B21 |

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13475\_div/13475\_div.html (Worldwide)

#### **HP IP Console Switch G2 with Virtual Media & CAC**

| HP 1x4 USB/PS2 KVM Console Switch                                   | AF611A |
|---|--------|
| HP 1x1Ex8 KVM IP Console Switch G2 with Virtual Media CAC Software  | AF620A |
| HP 2x1Ex16 KVM IP Console Switch G2 with Virtual Media CAC Software | AF621A |
| HP 4x1Ex32 KVM IP Console Switch G2 with Virtual Media CAC Software | AF622A |

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13474\_div/13474\_div.html (Worldwide)

#### **HP Care Pack Services**

#### **Proactive Care**

**NOTE:** Collaborative Support plus Proactive services delivered by the onshore, local language Advanced Solution Center (ASC), end-to-end case ownership from a Technical Solution Specialists and Technical Account Manager who remotely delivers firmware/software revision management, proactive scans and incident trend reports. Recommended for customers running a virtualized infrastructure and/or customers who desire an enhanced call support experience.

HP 3 year Next business day ProLiant s6500 Proactive Care Service U3C66E
HP 3 year 4 hour 24x7 ProLiant s6500 Proactive Care Service U3C72E

#### **Collaborative Support**

**NOTE:** Hardware break/fix plus 24x7 software diagnosis support with collaborative call management for a broad spectrum of 3rd Party software products including O/S and hypervisors. Recommended for customers procuring 3rd party SW O/S and hypervisors from the software vendors directly and deploying them on HP ProLiant servers.

HP 3 year Next business day ProLiant s6500 Collaborative Support

U1M46E

HP 3 year 4 hour 24x7 ProLiant s6500 Collaborative Support

U1M52E

#### **Installation Services**

**NOTE:** Reduce the time required to get your system up and running and help minimize disruptions to your business.

HP 3 year Next business day ProLiant s6500 Hardware Support UR398E
HP 3 year 4 hour 24x7 ProLiant s6500 Hardware Support UR402E

### **Additional Options**

**NOTE:** For more information, customer/resellers can contact: http://www.hp.com/services/carepack



#### **Technical Specifications**

**System Unit** Chassis Dimensions (H x W 6.96 x 17.638 x 35.236in (17.68 x 44.8 x 89.55cm)

x D)

Weight Maximum 220lb (99.8kg)

(approximate) (all hard drives, power

supplies, and processors

installed)

**Input Requirements** (per power supply)

Rated Line Voltage 90 to 140 VAC

180 to 264 VAC

Rated Input Current 7.31A at 115VAC

3.6A at 230VAC

Rated Input Frequency 47 to 63 Hz

Rated Input Power 855W (at 100 VAC),

840.72W (at 200 VAC)

**Power Specifications** To review system power requirements, use the HP Power Advisor which is

available via download or online at www.hp.com/go/hppoweradvisor

Power Supply Output

(per power supply)

**Relative Humidity** 

(non-condensing)

System Inlet

**Temperature** 

Rated Steady-State Power 653.10W (at 100 VAC),

653.08W (at 200 VAC)

Operating 50° to 95° F (10° to 35° C) at sea level with an

altitude derating of 1.8°F per every 1000 ft (1.0°C per every 304.8 m) above sea level to a maximum of 10,000 ft (3048 m), no direct sustained sunlight. Maximum rate of change is 18°F/hr (10°C/hr). The upper limit may be limited by the

type and number of options installed.

System performance may be reduced if operating

with a fan fault or above 86°F (30°C).

Non-operating -22° to 140° F (-30° to 60° C)

Maximum rate of change is 36°F/hr (20°C/hr).

Operating 10% to 90% relative humidity (Rh), 82.4°F (28°C) maximum wet bulb temperature, non-

condensing.

Non-operating 5% to 95% relative humidity (Rh), 101.7°F

(38.7°C) maximum wet bulb temperature, non-

condensing.

**Altitude** Operating 10,000 ft (3048 m). This value may be limited by

the type and number of options installed.

Maximum allowable altitude change rate is 1500

ft/min (457 m/min).

Non-operating 30,000 ft (9144 m). Maximum allowable altitude

change rate is 1500 ft/min (457 m/min).

Acoustic Noise Listed are the declared A-Weighted sound power levels (LWAd) and declared

average 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



### **Technical Specifications**

LWAd 6.4 LpAm 45dBA

Operating

LWAd 6.7

LpAm 51dBA
C Rating Class A

**Emissions Classification** (EMC)

FCC Rating Class A
Normative Standards CISPR 2

CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC

60950-1

**NOTE:** Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.

### Environment-friendly Products and Approach

### End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest HP sales office. Products returned to HP 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 web site at: <a href="http://www.hp.com/go/green">http://www.hp.com/go/green</a>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.