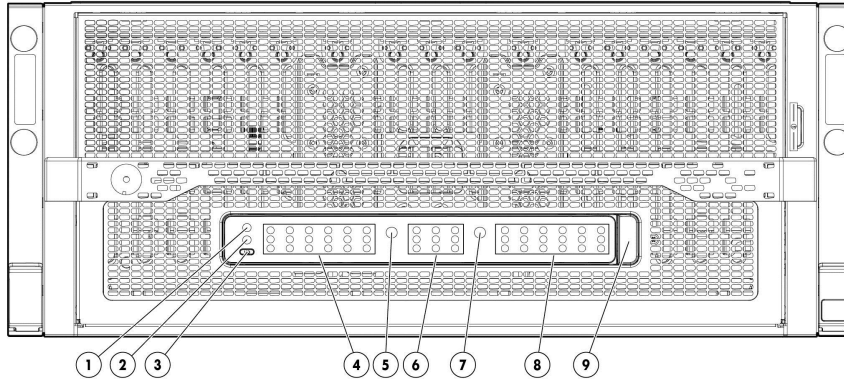


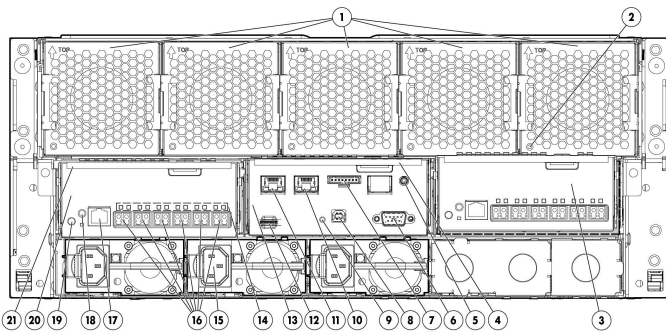
Overview

Faster innovation and unprecedented scale begins with the Moonshot 1500 Chassis. Specifically designed to support servers using mobile device chips, the 4.3U chassis enables shared management, networking, storage, power, cooling, and switching. It supports up to 45 hot-pluggable, efficient, extreme low-energy servers and/or storage cartridges, each tuned to a specific workload.



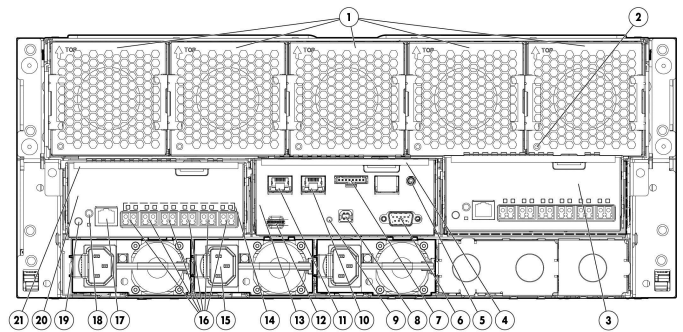
Front View

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Chassis Power LED 2. System health LED 3. Chassis UID/LED/button 4. Front Panel Display LED, Moonshot server 1-18 5. Switch Module A Health LED | <ol style="list-style-type: none"> 6. Front Panel Display LED, Moonshot server 19-27 7. Switch module B health LED 8. Front Panel Display LED, Moonshot server 28-45 9. Front Panel Display release |
|--|---|



Back View with HP Moonshot-6SFP Uplink Modules

1. Fans
2. Fan LED
3. HP Moonshot-6SFP Uplink Module B
4. Chassis management module release lever
5. HP Moonshot 1500 Chassis Management Module UID LED/button
6. Serial port
7. Rack control modular connection
8. USB port
9. HP Moonshot 1500 Chassis Management module LED
10. iLO2 connector

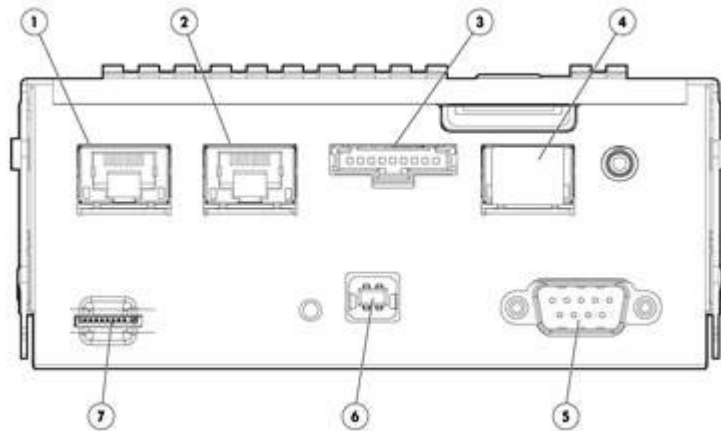


Back View with HP Moonshot-4QSFP+ Uplink Modules

1. Fans
2. Fan LED
3. HP Moonshot-4QSFP+ Uplink Module B
4. Chassis management module release lever
5. HP Moonshot 1500 Chassis Management Module UID LED/button
6. Serial port
7. Rack control modular connection
8. USB port
9. HP Moonshot 1500 Chassis Management module LED
10. iLO2 connector

Overview

- | | |
|---|---|
| 11. iLO1 connector (primary) | 11. iLO1 connector (primary) |
| 12. SD card slot | 12. SD card slot |
| 13. HP Moonshot 1500 Chassis Management Module | 13. HP Moonshot 1500 Chassis Management Module |
| 14. Switch module uplink/downlink activity LEDs | 14. Switch module uplink/downlink activity LEDs |
| 15. Power supply connector | 15. Power supply connector |
| 16. 10Gb SFP connector (x6) | 16. 40Gb QSFP+ connector (x4) |
| 17. Serial connector | 17. Serial connector |
| 18. Uplink module UID/LED button | 18. Uplink module UID/LED button |
| 19. Uplink module health LED | 19. Uplink module health LED |
| 20. HP Moonshot-6SFP Uplink Module A | 20. HP Moonshot-4QSFP+ Uplink Module A |
| 21. Uplink module release lever | 21. Uplink module release lever |



HP Moonshot 1500 Chassis Management Module

- | | |
|--|--|
| 1. iLO Chassis Manager management port | 5. iLO CM management serial port |
| 2. iLO CM link port (disabled by default) | 6. Moonshot 1500 CM module USB connector |
| 3. Moonshot 1500 CM module SL-APM port | 7. Moonshot 1500 CM module MicroSD slot |
| 4. Moonshot 1500 CM module diagnostic port | |

Models

HP Moonshot 1500 m300 Configure-to-order Chassis

747049-B21

NOTE: Must order a minimum of 15 identically configured ProLiant m300 server cartridges.

HP Moonshot 1500 m700 Configure-to-order Chassis

740872-B21

NOTE: Must order a minimum of 15 identically configured ProLiant m700 server cartridges.

NOTE: For ordering requirements please see the Configure to Order section of this QuickSpecs.

NOTE: For information on HP ProLiant Moonshot Server, designed with the Intel™ Atom™ Processor S1200 Series, please visit: http://h18000.www1.hp.com/products/quickspecs/14527_div/14527_div.html

Standard Features

This document covers the HP Moonshot 1500 Chassis. Components include chassis management module, power supplies, fans, and cables. For more information on HP Moonshot server cartridges, switch modules, or uplink modules, see the following QuickSpecs:

HP ProLiant m300 server cartridge

http://h18000.www1.hp.com/products/quickspecs/14736_div/14736_div.html

HP ProLiant m700 server cartridge

http://h18000.www1.hp.com/products/quickspecs/14737_div/14737_div.html

HP Moonshot-45G Switch Module

http://h18000.www1.hp.com/products/quickspecs/14732_div/14732_div.html

HP Moonshot-180G Switch Module

http://h18000.www1.hp.com/products/quickspecs/14731_div/14731_div.html

HP Moonshot-6SFP Uplink Module

http://h18000.www1.hp.com/products/quickspecs/14734_div/14734_div.html

HP Moonshot-4QSFP+ Uplink Module

http://h18000.www1.hp.com/products/quickspecs/14733_div/14733_div.html

HP ProLiant Moonshot Server; pre-configured with a single Intel™ Atom™ Processor S1260

http://h18000.www1.hp.com/products/quickspecs/14527_div/14527_div.html

HP Moonshot System

The HP Moonshot system uses an innovative new architecture that results from one simple design tenet: to align purpose-built modules with the right workload for optimal performance. Traditional servers rely on dedicated components, including management, networking, storage, power supplies and cooling fans in a single chassis. In contrast, the Moonshot 1500 Chassis shares these chassis components and is capable of supporting 45 solution cartridges, or up to 180 nodes, per 4.3U chassis. This provides the unique ability to generate greater revenue from a smaller footprint while dramatically reducing operational costs.

HP Moonshot 1500 Chassis

The Moonshot 1500 chassis holds up to 45 server and/or storage cartridges plus redundant network switches. It includes a shared base-plane with three multi-terabit high-speed fabrics: to connect server cartridges to the network, to connect server cartridges to storage cartridges, and to connect server cartridges to neighboring server cartridges. Power is delivered through a pooled-power back-plane that ensures the full capacity of the hot-plug power supplies is available to all cartridges.

Each Moonshot 1500 Chassis is built with the following functions:

- Up to 45 server and/or storage cartridges per chassis.
- Up to 2 independently paired network and uplink modules supported simultaneously within the chassis.
- Five dual-rotor, hot-plug, redundant fans as standard.
- Optionally redundant hot-plug power supplies
- Optionally redundant interconnect modules.
- The HP Moonshot 1500 Chassis Management module manages the health of the chassis and servers.

A Moonshot 1500 chassis provides the following benefits:

- Lowest cost of ownership.
- With local and remote hardware management integrated across the solution, one full enclosure can be managed as easily as one server.
- Investment protection: Accommodates multiple server and network designs in one enclosure.
- Lower costs per server, in comparison to rack-mounted servers

Standard Features

- Lower power consumption, in comparison to rack-mounted servers.
- Lower airflow requirements, in comparison to rack-mounted servers

HP ProLiant server cartridges

HP ProLiant m300 server cartridge

HP Moonshot System with the HP ProLiant m300 server cartridge was created for cost-effective Dynamic Content Delivery, front-end Web and online analytics. The ProLiant m300 server cartridge has one Intel Avoton-based System on a Chip (SoC) server having up to eight cores with integrated Ethernet along with one 2.5" hard drive and support for up to 32GB of memory on a compact cartridge.

For more information, please visit:

http://h18000.www1.hp.com/products/quickspecs/14736_div/14736_div.html

HP ProLiant m700 server cartridge

HP Moonshot System with the HP ProLiant m700 server cartridge was created for cost-effective Hosted Desktop Infrastructure (HDI), Media Transcoding, and other video processing applications. The ProLiant m700 server cartridge has four AMD X2150 APU System on a Chip (SoC) having up to four x86 cores with integrated Graphics Processing Unit (GPU) and each supporting 8GB of memory.

For more information, please visit:

http://h18000.www1.hp.com/products/quickspecs/14737_div/14737_div.html

NOTE: Mixing of server cartridges in the same chassis is not supported.

HP Interconnect modules

NOTE: Up to two identical pairs of Switch and Uplink modules are supported in the Moonshot 1500 Chassis. Dual switch modules are required for network redundancy, regardless of cartridge configuration.

HP Moonshot-45G Switch Module

Switch with 45 1 GbE downlink ports.

Compatible with HP Moonshot-6SFP Uplink Module in the Moonshot 1500 Chassis.

For more information, please visit:

HP Moonshot-45G Switch Module

http://h18000.www1.hp.com/products/quickspecs/14732_div/14732_div.html

HP Moonshot-180G Switch Module

Switch with 180 1 GbE downlink ports.

Compatible with HP Moonshot-4QSFP+ Uplink Module in the Moonshot 1500 Chassis.

For more information, please visit:

HP Moonshot-180G Switch Module

http://h18000.www1.hp.com/products/quickspecs/14731_div/14731_div.html

HP Moonshot-6SFP Uplink Module

Networking faceplate module with 6 10GbE SFP+ uplink ports.

Compatible with HP Moonshot-45G Switch Module in the Moonshot 1500 Chassis.

For more information, please visit:

HP Moonshot-6SFP Uplink Module

http://h18000.www1.hp.com/products/quickspecs/14734_div/14734_div.html

HP Moonshot-4QSFP+ Uplink Module

Networking faceplate module with 4 40GbE QSFP+ uplink ports.

Compatible with HP Moonshot-180G Switch Module in the Moonshot 1500 Chassis.

For more information, please visit:

Standard Features

HP Moonshot-4QSFP+ Uplink Module

http://h18000.www1.hp.com/products/quickspecs/14733_div/14733_div.html

HP Moonshot 1500 Chassis Management Module

HP Moonshot 1500 Chassis Management module, complete with support for SL-APM.

The HP Moonshot 1500 Chassis Management module manages the health of the chassis and servers and includes a command-line interface accessible via SSH to configure the chassis and server settings and control server power and UID lights, use Virtual Serial Port to servers, and to flash firmware in the chassis. It also supports IPMI management.

On System Management

HP Moonshot iLO Chassis Management Firmware is the gateway for aggregated chassis management on HP Moonshot. Moonshot iLO CM firmware reduces cost and power by sharing four iLO modules across the nodes and other system components. As a single point of access to the chassis, Moonshot iLO CM firmware allows you to configure, update, and operate HP Moonshot via CLI, IPMI, and remote serial console access.

For more information, see the HP Moonshot iLO Chassis Management Firmware User Guide on the HP Project Moonshot Information Library (<http://www.hp.com/go/moonshot/docs>).

HP Common Slot Power Supply

HP Moonshot 1500 Chassis can accommodate up to four (4) HP Common slot power supplies listed in Step 2 of the Configure to Order section of this QuickSpecs.

HP's Common Slot (CS) power supplies allow for commonality of power supplies across a wide range of ProLiant and Integrity servers, as well as HP Storage solutions, and are designed to provide the highest power supply efficiency without degrading system performance. HP CS power supplies are tested by the Electric Power Research Institute (EPRI) and certified through the ECOS 80 Plus power supply program. HP CS power supply options provide efficiency ratings of up to 94% and are available in a 1500W configuration for this platform. All HP Common Slot power sources are UL, CE Mark Compliant, hot-plug and support redundant configurations. HP Power Advisor can be accessed at: www.hp.com/go/hppoweradvisor.

NOTE: Redundant Power: Optional redundant power supplies will vary based on configurations. Please refer to specific HP Moonshot server cartridge for details.

Optional Features

Factory Express Portfolio for Servers and Storage 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 asset tagging, and custom packaging. HP products supported through Factory Express include a wide array of servers and storage: HP Moonshot, HP Integrity, HP ProLiant, HP ProLiant Server Blades, and 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>.

Services and Support

Services and Support

HP Technology Services for Moonshot

Capitalizing on the Moonshot 1500 System 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 Technology Services.

HP is pleased to include full software support for Ubuntu Linux as part of your Moonshot chassis purchase. For chassis supporting revenue-generating or production level workloads, consider purchasing a level of support that matches your requirements.

Protect your business beyond warranty with HP Care Pack Services

HP sells support in easy-to-buy, preconfigured packages with the combination of services, coverage and duration to fit your needs and budget. With Moonshot, we are introducing a new, simpler set of services. Simply choose the service level that best fits the criticality of your hardware.

HP Foundation Care

HP introduces new Foundation Care services offer scalable reactive support-packages for HP Moonshot and software. You can choose the type and level of service that is most suitable for your IT and business needs. The Moonshot 1500 Care Pack services cover the Moonshot 1500 Chassis and the Moonshot servers with one single Care Pack SKU. Entitlement of support requires the customer to provide the 1500 chassis serial number. All HP components structured to the Moonshot System are covered by Care Pack services inclusive of switches, power supplies, and fans. HP Foundation Care services include hardware support, basic software support and collaborative call handling for software questions related to industry leading operating systems and software. For a complete list of software products covered, refer to: www.hp.com/services/collaborativesupport.

Full software support, including call management and ownership thru to resolution is available for select third party software. As stated earlier, support for Ubuntu software is included in the purchase of your Moonshot chassis.

HP Datacenter Care

HP Datacenter Care offers you a flexible, tailored, relationship-based approach to support the most demanding data centers handling the demands of hyperscale computing. This is an environment level service, purchased once to support your Moonshot environment. Other equipment may be included in this agreement for holistic datacenter coverage. With HP Datacenter Care, you still have the choice of HP Foundation Care reactive support which you purchase with each chassis.

HP Datacenter Care is flexible enough to deliver exactly what you need in one relationship. All Datacenter Care support is tailored to your needs, based on our experience with hyperscale customers:

- Assigned account team, led by an account support manager (ASM) who knows your business and your IT environment and is responsible for the quality service delivery and experience.
- Enhanced call handling for the best call experience with rapid escalation and incident resolution through the HP Hyperscale Center of Excellence
- Proactive and reactive support, configured to deliver the level of support needed by the different data center components and meeting both service-level agreement (SLA) and cost targets

Then add on other services that are tailored to your specific needs, including:

HP Self-Service Spares Service answers the question: What do you do when you need parts? We can set it up so that you get spare parts onsite through our automated self-service spares. You simply go to the part

Services and Support

of your data center where the parts live, scan them out, scan in the broken one, and you're done. We maintain your inventory of good spares, so that what you need is ready to go when you need it. And we provide monthly service excellence reports illustrating onsite inventory performance.

To obtain further information or to order HP Datacenter Care Service as described above, contact a local HP sales representative. Please see the Additional Options section of this QuickSpecs for additional information.

HP Moonshot Installation & Startup Service

HP Installation and Startup Service for the Moonshot System provides for the installation of one system and its associated Moonshot servers and network switches, as well as operating system deployment and basic configuration of OS network parameters to establish network connectivity

In response to the needs of the majority of HP Moonshot System customers, this fixed-price/fixed deliverable service targets new hardware installation and software deployments for the 1500 infrastructure. For more advanced installation, configuration, and integration requirements, custom deployments are available through a customized Statement of Work. . Please see the Additional Options section of this QuickSpecs for additional information.

For more information on HP Services, contact any of our worldwide sales offices or visit one of the following websites:

HP support services: www.hp.com/services/alwayson

HP Care Pack services: www.hp.com/services/carepack

Recommended HP Care Pack Services for your HP product

Optimized Care

3-Year HP Foundation Care Call to Repair

This is HP's highest level of reactive support giving you our commitment to have the hardware operational within six hours of opening the call with us. This service level includes hardware coverage plus software diagnosis support with collaborative call management for a broad spectrum of third party software products including O/S and hypervisors.

<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA4-8877ENW.pdf>

Standard Care

3-Year HP Foundation Care 24x7

This service level provides consistent, reliable reactive support with the broadest coverage window which is recommended when maintenance must be performed outside business hours. Calls may be opened 24x7. Should an onsite visit be needed, our commitment is to respond onsite within four hours. Software call back commitment is two hours.

<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA4-8877ENW.pdf>

Services and Support

Basic Care

3- Year HP Foundation Care Next Business Day

This service level provides the most economical support coverage and is designed for non-revenue impacting systems. Calls may be opened 24x7. Should an onsite visit be needed, our commitment is to respond onsite the next business day. Software call back commitment is two hours, during regular business hours.

For more information on HP Care Pack services, contact any of our worldwide sales offices or resellers or visit our website at: www.hp.com/go/carepack

Defective Media Retention (DMR) and Comprehensive Defective Material Retention

If your business deals with sensitive or legally protected data, you know that it's not a simple matter to return a defective hardware component, but keeping it conflicts with the terms and conditions of many standard warranty agreements. If you don't return the component, you'll be charged for the replacement part.

HP Foundation Care services are available with defective media retention of failed hard drives and comprehensive defective material retention of those other data-retentive components, such as memory, switches, processors and more. This may be purchased as an optional add-on to your HP Foundation Care service purchase. This service is critical for customers who:

- Need to control and secure their classified, proprietary and confidential data.
- Are subject to current data privacy regulations.
- Want a simpler, more cost-effective solution when choosing not to return a malfunctioning disk drive or other data retentive component.

For more information on our data privacy services, see: www.hp.com/services/dataprivacy

HP Support Center

HP provides several tools that make it simpler to get help from HP:

HP Support Center is personalized online support portal with access to information, tools and experts to support HP business products. Submit support cases online, chat with HP experts, access support resources or collaborate with peers. Learn more: <http://www.hp.com/go/hpsc>

HP's Support Center Mobile App allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalize IT support anywhere, anytime. HP Support Center are available at no additional cost with a HP warranty, HP Care Pack or HP contractual support agreement.

NOTE: HP Support Center Mobile App is subject to local availability.

Services and Support

Parts and Materials

HP will provide HP-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HP due to malfunction.

For more information

To learn more on HP Moonshot System, please contact your HP sales representative.

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: Factory Integrated Models must start with an HP Moonshot 1500 Chassis. Each Moonshot 1500 Chassis will be ordered with minimum configurations as follows:

Minimum of fifteen (15) identically configured Moonshot server cartridges per chassis.

Three (3) 1500W Common Slot Platinum Plus Power Supplies

NOTE: Additional power supply kits may be ordered to achieve N+1 or N+N redundancy.

One (1) HP Moonshot-45G Switch Module and

One (1) HP Moonshot-6SFP Uplink Module

or

One (1) HP Moonshot-180G Switch Module and

One (1) HP Moonshot-4QSFP+ Uplink Module

NOTE: A second Switch and Uplink pair may be ordered to give a redundant network configuration or to enable two separate networks utilizing different Moonshot servers.

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.

Step 1: Base Configuration (Choose one HP Moonshot 1500 Chassis)

HP Moonshot 1500 Chassis

HP Moonshot 1500 m300 Configure-to-order Chassis

747049-B21

NOTE: Must order a minimum of 15 identically configured ProLiant m300 server cartridges.

NOTE: For additional configure to order requirements please visit the HP ProLiant m300 Server Cartridge QuickSpecs:

http://h18000.www1.hp.com/products/quickspecs/14536_div/14536_div.html

HP Moonshot 1500 m700 Configure-to-order Chassis

740872-B21

NOTE: Must order a minimum of 15 identically configured ProLiant m700 server cartridges.

NOTE: For additional configure to order requirements please visit the HP ProLiant m700 Server Cartridge QuickSpecs:

http://h18000.www1.hp.com/products/quickspecs/14537_div/14537_div.html

Configuration Information - Factory Integrated Models

Step 1A: Configure Moonshot Servers (one of each unless otherwise noted)

HP ProLiant Server Cartridges	HP ProLiant m300 Server Cartridge	734619-B21
	NOTE: Must order a minimum of 15 identically configured Moonshot m300 server cartridges. NOTE: Must order the HP Moonshot 1500 m300 Configure-to-order Chassis (PN 747049-B21) when ordering the HP ProLiant m300 Server Cartridge.	
HP Hard Drives	HP ProLiant m700 Server Cartridge	733747-B21
	NOTE: Must order a total of 15 identically configured Moonshot m700 server cartridges. NOTE: Must order the HP Moonshot 1500 m700 Configure-to-order Chassis (PN 740872-B21) when ordering the HP ProLiant m700 Server Cartridge.	
	NOTE: The HP ProLiant m300 Server Cartridge (P/N 734619-B21) supports one (1) hard driver per cartridge. The HP ProLiant m700 Server Cartridge (P/N 733747-B21) does not support hard drive options.	
	6G SATA Quick Release SFF (2.5-inch) Midline (MDL) Drives	
	HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) Quick Release Midline 1yr Warranty Hard Drive	632080-B21
	HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) Quick Release Midline 1yr Warranty Hard Drive	632078-B21
NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/13021_na/13021_na.html		
6G SATA Value Endurance Quick Release SFF (2.5-inch) Enterprise Value Solid State Drives		
HP 240GB 6G SATA Value Endurance SFF 2.5-in Quick-release Enterprise Value 3yr Wty Solid State Drive	718180-B21	
3G SATA MLC Quick Release SFF (2.5-inch) Enterprise Mainstream Solid State Drives		
HP 200GB 3G SATA MLC SFF (2.5-inch) Quick-release Enterprise Mainstream 3yr Wty Solid State Drive	636623-B21	
NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/14038_na/14038_na.html NOTE: The non-hot plug hard drives use a quick release carrier.		

Configuration Information - Factory Integrated Models

Step 2: Choose Required Options (one of each unless otherwise noted)

HP Power Supplies

HP Common Slot Platinum Plus Power Supply Kits

NOTE: 94% efficiency

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

684532-B21

NOTE: Minimum of three (3) and maximum of four (4) 1500W power supplies per chassis when configured with 15 of the HP ProLiant m300 Server Cartridge (PN 734619-B21).

NOTE: Minimum of three (3) and maximum of four (4) 1500W power supplies per chassis when configured with 15 of the HP ProLiant m700 Server Cartridge (733747-B21). Minimum of four 1500W power supplies per chassis when configured with 45 of the HP ProLiant m700 Server Cartridge (733747-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

Networking

HP Moonshot 45G Switch Module Kit

704644-B21

HP Moonshot 6SFP Uplink Module Kit

704646-B21

NOTE: The HP Moonshot-45G Switch Module and HP Moonshot-6SFP Uplink Module are only supported with the HP ProLiant m300 Server Cartridge.

HP Moonshot-180G Switch Module Kit

704642-B21

HP Moonshot-4QSFP+ Uplink Module Kit

704652-B21

NOTE: The HP Moonshot-180G Switch Module and HP Moonshot-4QSFP+ Uplink Module are only supported with the HP ProLiant m700 Server Cartridge.

NOTE: One of each the Switch Module and Uplink Module per chassis with any quantity of server cartridges.

NOTE: Two of each the Switch Module and Uplink Module per chassis required to allow any configuration with redundant or dual networks.

Step 3: Choose additional Factory Integration Options

HP Rack Adapter

HP 13U FIO Rack Adapter Kit for 3X4.3U Chassis

681677-B21

NOTE: Group the HP Moonshot 1500 Chassis units into a 13U space. Order one per three chassis. The 0.66U spacer is not used when selecting this option.

Configuration Information - Factory Integrated Models

Step 4: Choose additional options for factory integration

HP Power Cords

HP C13 - Nema 5-15P US/CA 110V 10Amp 1.83m Power Cord	AF556A
HP C13 - GB-1002 CN 250V 10Amp 1.83m Power Cord	AF557A
HP C13 - IRAM -2073 AR 250V 10A 2.5m Power Cord	AF558A
HP C13 - Nema 5-15P TH/PH 250V 10Amp 1.83m Power Cord	AF559A
HP C13 - CNS-690 TW 110V 13Amp 1.83m Power Cord	AF561A
HP C13 - IS-1293 IN 240V 6Amp LV 2.0m Power Cord	AF562A
HP C13 - KSC- 8305 KR 250V 10Amp 1.83m Power Cord	AF560A
HP C13 - SI-32 IL 250V 10Amp 1.83m Power Cord	AF564A
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 - SABS-164 ZA 250V 10Amp 2.5m Power Cord	AF567A
HP C13 - CEE-VII EU 250V 10Amp 1.83m Power Cord	AF568A
HP C13 - AS3112-3 AU 250V 10Amp 2.5m Power Cord	AF569A
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 - JIS C8303 JP 100V 12Amp 2.0m Power Cord	AF572A
HP C13 - IS-1293 IN 250V 10Amp HV 2.5m Power Cord	SG579A
HP C13 - C14 WW 250V 10Amp Flint Gray 2.0m Jumper Cord	AF573A
HP C13 - NBR-14136 BR 250V 10Amp 1.83m Power Cord	AF591A
HP C13 - C14 WW 250V 10Amp 2.0m Jumper Cord	A0K02A
HP C13 - C14 WW 250V 10A Gray 0.7m Jumper Cord	A0K03A
HP C13 - C14 WW 250V 10A Gray 1.37m Jumper Cord	A0K04A
HP C13 - C14 WW 250V 10A Gray 3.0m Jumper Cord	A0K06A
HP C13 - Nema 6-15P US 250V 15A JP 3.6m Power Cord	A0N33A

Configure to Order - Factory Integrated Models

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.

High Performance Clusters	HP Insight Cluster Management Utility Media NOTE: For additional license kits please see the QuickSpecs at: http://h18004.www1.hp.com/products/quickspecs/12612_div/12612_div.html	BD477A
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HP SL Advanced Power Manager	<p>The SL Advanced Power Manager is an optional rack level solution for the HP Moonshot System which enables server-level DC (or hardware) power on and off and server-level monitoring. In addition, the SL APM will automatically discover hardware components which are connected into the SL APM solution.</p> <p>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 HP Moonshot System share power supplies to optimize power efficiency, using 'switched' PDUs to turn off all the power supplies in the chassis will result in the loss of all server nodes in that chassis. The SL APM solves this by allowing server node-level hardware power on/off of the DC power to the individual server node motherboards.</p>	
	HP SL Advanced Power Manager Kit	538084-B21
	HP SL Advanced Power Manager Distribution Module Kit	620002-B21

SFP Options	HP BLc Virtual Connect 1Gb SX Small Form Factor Pluggable Option Kit	453151-B21
	HP BLc Virtual Connect 1Gb RJ-45 Small Form Factor Pluggable Option Kit	453154-B21

SFP+ Options	HP BladeSystem c-Class 10Gb Short Range Small Form-Factor Pluggable Option	455883-B21
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QSFP+ Options	HP X140 40G QSFP+ MPO SR4 Transceiver	JG325A
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Configure to Order - Factory Integrated Models

Direct Attach Cables	HP BladeSystem c-Class Small Form-Factor Pluggable .5m 10GbE Copper Cable	487649-B21
	HP BladeSystem c-Class Small Form-Factor Pluggable 1m 10GbE Copper Cable	487652-B21
	HP BladeSystem c-Class Small Form-Factor Pluggable 3m 10GbE Copper Cable	487655-B21
	HP BladeSystem c-Class Small Form-Factor Pluggable 5m 10GbE Copper Cable	537963-B21
	HP BladeSystem c-Class Small Form-Factor Pluggable 7m 10GbE Copper Cable	487658-B21
	HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
	HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
	HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
	HP X240 10G SFP+ to SFP+ 0.65m Direct Attach Copper Cable	JD095B
	HP X240 10G SFP+ to SFP+ 1.2m Direct Attach Copper Cable	JD096B
	HP X240 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	JD097B
	HP X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C
	HP C-Series SFP+ to SFP+ Copper 3.0m Direct Attach Cable	AP784A
	HP C-Series SFP+ to SFP+ Copper 5.0m Direct Attach Cable	AP785A
	HP B-series SFP+ to SFP+ Active Copper 1.0m Direct Attach Cable	AP818A
	HP B-series SFP+ to SFP+ Active Copper 3.0m Direct Attach Cable	AP819A
	HP B-series SFP+ to SFP+ Active Copper 5.0m Direct Attach Cable	AP820A
	HP X240 40G QSFP+ QSFP+ 1m Direct Attach Copper Cable	JG326A
	HP X240 40G QSFP+ QSFP+ 3m Direct Attach Copper Cable	JG327A
	HP X240 40G QSFP+ QSFP+ 5m Direct Attach Copper Cable	JG328A
	HP X240 40G QSFP+ to 4x10G SFP+ 1m Direct Attach Copper Splitter Cable	JG329A
	HP X240 40G QSFP+ to 4x10G SFP+ 3m Direct Attach Copper Splitter Cable	JG330A
	HP X240 40G QSFP+ to 4x10G SFP+ 5m Direct Attach Copper Splitter Cable	JG331A
	HP X240 40G QSFP+ to 4x10G SFP+ 5m Direct Attach Copper Splitter Cable	JG331A

NOTE: The transceivers and cables listed above have been qualified and certified to work with this product. Transceiver and DAC cables from any manufacturer will be accepted, but they will not be supported by HP.

HP Rail Kits (Chassis Specific)	HP 4.3U Server Rail Kit	681254-B21
	HP 0.66U Spacer Blank Kit	681260-B21

NOTE: For data center airflow management purposes, it is recommended that either the .66U Spacer Blank or the 13U FIO Rack Adapter Kit can be ordered.

NOTE: The HP 4.3U Rail Kit is required to be ordered for every chassis to properly install the chassis into a rack.

NOTE: The .66U Spacer Blank kit may be ordered and will give an even 5U (4.3U+0.66U) spacing in a rack. This would enable installing up to 8 chassis in a 42U rack. It is also possible to stack up to 9 chassis in a 42U rack using the 13U FIO Rack Adapter Kit. (See Step 3 of the Factory Integrated Models section). If the 13U kit is used, the .66U spacer would not be used and vice versa.

Configure to Order - Factory Integrated Models

Rack Adapter	HP 13U FIO Rack Adapter Kit for 3X4.3U Chassis NOTE: Group the HP Moonshot 1500 Chassis units into a 13U space. Order one per three chassis. The 0.66U spacer is not used when selecting this option.	681677-B21
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HP Rack Series	HP Intelligent Series Rack	
	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
	NOTE: Rack chosen is required to have 1200mm to provide space for cable management arm at the rear of the chassis and host PDU in the rear of the rack.	
	NOTE: Please see the QuickSpecs 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	KVM Consoles	
	HP TFT7600 KVM Console US Kit	AZ870A
	HP TFT7600 KVM Console UK Kit	AZ871A
	HP TFT7600 KVM Console GR Kit	AZ872A
	HP TFT7600 KVM Console FR Kit	AZ873A
	HP TFT7600 KVM Console Itl Kit	BW914A
	HP TFT7600 KVM Console SP Kit	AZ875A
	HP TFT7600 KVM Console Den Kit	AZ876A
	HP TFT7600 KVM Console Nw Kit	AZ877A
	HP TFT7600 KVM Console SE-FI Kit	AZ878A
	HP TFT7600 KVM Console Swi Kit	AZ879A
	HP TFT7600 KVM Console Port Kit	AZ880A
	HP TFT7600 KVM Console Bel Kit	AZ881A
	HP TFT7600 KVM Console JPN Kit	AZ882A
	HP TFT7600 KVM Console Rus Kit	AZ883A
	HP TFT7600 KVM Console Intl Kit	AZ884A
	HP TFT7600 KVM Console US TAA Kit	AZ885A
	HP 0x2x16 KVM SVR CNSL G2 VM CAC SW	AF618A
	HP 0x2x32 KVM SVR CNSL G2 VM CAC SW	AF619A
	HP 1x1Ex8 KVM IP CNSL G2 VM CAC SW	AF620A
	HP 2x1Ex16 KVM IP CNSL G2 VM CAC SW	AF621A
	HP 4x1Ex32 KVM IP CNSL G2 VM CAC SW	AF622A

Configure to Order - Factory Integrated Models

HP Uninterruptible Power Systems **HP Rack-mountable UPS**

HP R1500 G3 Uninterruptible Power Supply (UPS)

HP R1.5kVA G3 1U NA Uninterruptible Power System	AF469A
HP R1.5kVA G3 1U JP/TW Uninterruptible Power System	AF470A
HP R1.5kVA G3 1U INTL Uninterruptible Power System	AF471A

NOTE: Please see the QuickSpecs for additional information:

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 L530 Low Voltage NA/JP Uninterruptible Power System	AF466A
HP R/T3000 G2 2U L620 High Voltage NA/JP Uninterruptible Power System	AF467A
HP R/T3000 G2 2U Detachable Cord High Voltage INTL Uninterruptible Power System	AF468A

NOTE: Please see the QuickSpecs for additional information:

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

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

NOTE: For additional information on sizing your server, 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.

HP Intelligent Power Distribution Units (iPDU)

iPDU Core Units

HP 4.9kVA 24A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF520A
HP 8.3kVA 40A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF521A
HP 8.6kVA 24A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF522A
HP 17.3kVA 48A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF523A
HP 7.3kVA 32A Single Phase INTL Core Intelligent Modular Power Distribution Unit	AF525A
HP 11kVA 16A Three Phase INTL Core Intelligent Modular Power Distribution Unit	AF526A
HP 22kVA 32A Three Phase INTL Core Intelligent Modular Power Distribution Unit	AF527A
HP 14.4kVA 40A Three Phase NA/JP Intelligent Modular Power Distribution Unit	AF533A

iPDU Extension Bars

HP 5xC13 Intelligent PDU Extension Bar G2 Kit	AF547A
HP 5xC13 Outlets Power and UID LEDs Pair Standard Extension Bar	AF528A

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

http://h18000.www1.hp.com/products/quickspecs/13650_div/13650_div.html
(Worldwide)

Configure to Order - Factory Integrated Models

HP Basic Power Distribution Units	HP 2.8kVA 120 Volt 18 Outlet NA/JP Basic Power Distribution Unit	H5M55A
	HP 3.6kVA 200-240 Volt 12 Outlet WW Basic Power Distribution Unit	H5M56A
	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 4.9kVA 208 Volt 30 Outlet NA/JP Basic Power Distribution Unit	H5M59A
	HP 8.3kVA 208 Volt 36 Outlet NA/JP Basic Power Distribution Unit	H5M60A
	HP 8.6kVA 208 Volt Three Phase 18 Outlet NA/JP Basic Power Distribution Unit	H5M61A
	HP 8.6kVA 208 Volt Three Phase 30 Outlet NA/JP Basic Power Distribution Unit	H5M62A
	HP 5.7kVA 208 Volt Three Phase 27 Outlet NA/JP Dual Voltage Basic Power Distribution Unit	H5M63A
	HP 8.6kVA 208 Volt Three Phase 30 Outlet NA/JP Dual Voltage Basic Power Distribution Unit	H5M64A
	HP 7.3kVA 230 Volt 20 Outlet INTL Basic Power Distribution Unit	H5M68A
	HP 7.3kVA 230 Volt 30 Outlet INTL Basic Power Distribution Unit	H5M70A
	HP 11kVA 230 Volt 36 Outlet INTL Basic Power Distribution Unit	H5M71A
	HP 11kVA 400 Volt Three Phase 30 Outlet INTL Basic Power Distribution Unit	H5M72A
	HP Hardwired 200-240 Volt 36 Outlet WW Basic Power Distribution Unit	H5M75A
	HP 13.2kVA 480 Volt Three Phase 15 Outlet NA Basic Power Distribution Unit	H3X07A
HP 277 Volt options for H3X07A and H3X08A		
	HP 800VA - 277V Input / 230V Output NA Rack Mount Transformer	H3X09A
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/14557_div/14557_div.html (Worldwide)	
	NOTE: 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 Monitored Power Distribution Units	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 3.6kVA 200-240 Volt 16 Outlet WW Monitored Power Distribution Unit	D9N45A
	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 7.3kVA 230 Volt 36 Outlet INTL Monitored Power Distribution Unit	D9N50A
	HP 8.3kVA 208 Volt 33 Outlet NA Monitored Power Distribution Unit	D9N49A
	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 8.6kVA 208 Volt Three Phase 21 Outlet NA/JP Monitored Power Distribution Unit	D9N51A
	HP 11kVA 400 Volt Three Phase 21 Outlet INTL Monitored Power Distribution Unit	D9N55A
HP 11kVA 400 Volt Three Phase 33 Outlet INTL Monitored Power Distribution Unit	D9N57A	

Configure to Order - Factory Integrated Models

HP 14.4kVA 208 Volt Three Phase 24 Outlet NA Monitored Power Distribution Unit	D9N58A
HP 16.6kVA 400 Volt Three Phase 24 Outlet NA Monitored Power Distribution Unit	D9N62A
HP 16.6kVA 400 Volt Three Phase 33 Outlet NA Monitored Power Distribution Unit	D9N61A
HP 17.3kVA 208 Volt Three Phase 24 Outlet NA/JP Monitored Power Distribution Unit	D9N59A
HP 17.3kVA 208 Volt Three Phase 27 Outlet NA/JP Monitored Power Distribution Unit	D9N54A
HP 19.9kVA 480 Volt Three Phase 30 Outlet NA Monitored Power Distribution Unit	D9N63A
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

Power Specifications

HP 1500W Common Slot Platinum Plus Hot Plug Power Supply

Part Number	684532-B21				
Input Voltage Range (Vrms)	200 - 240				
Frequency Range (Nominal) (Hz)	50 - 60				
Nominal Input Voltage (Vrms)	200	208	220	230	240
Maximum Rated Output Wattage	1500	1500	1500	1500	1500
Nominal Input Current (A rms)	8.4	8.1	7.6	7.3	7.0
Maximum Rated Input Wattage Rating (Watts)	1661	1659	1655	1652	1649
Maximum Rated VA (Volt-Amp)	1681	1679	1675	1672	1669
Efficiency (%) at Max. Rated Output Wattage	90.3	90.4	90.6	90.8	91.0
Power Factor	0.999	0.999	0.999	0.999	0.999
Leakage Current (mA)	0.50	0.75	0.79	0.83	1.00
Maximum Inrush Current (A peak)	40				
Maximum Inrush Current duration (mS)	0.2				
Maximum British Thermal Unit Rating (BTU-Hr)	5667	5661	5648	5637	5627

HP Power Advisor

The HP Power Advisor is a tool provided by Hewlett-Packard to assist in the estimation of power consumption and proper selection of components including power supplies at a system, rack, and multi-rack level. A variety of additional features are also provided including a condensed bill of materials, a cost of ownership calculator, and a power report. The HP Power Advisor allows for the mixing of rack, tower, blade, and other products in a single environment.

Available at: www.hp.com/go/hppoweradvisor

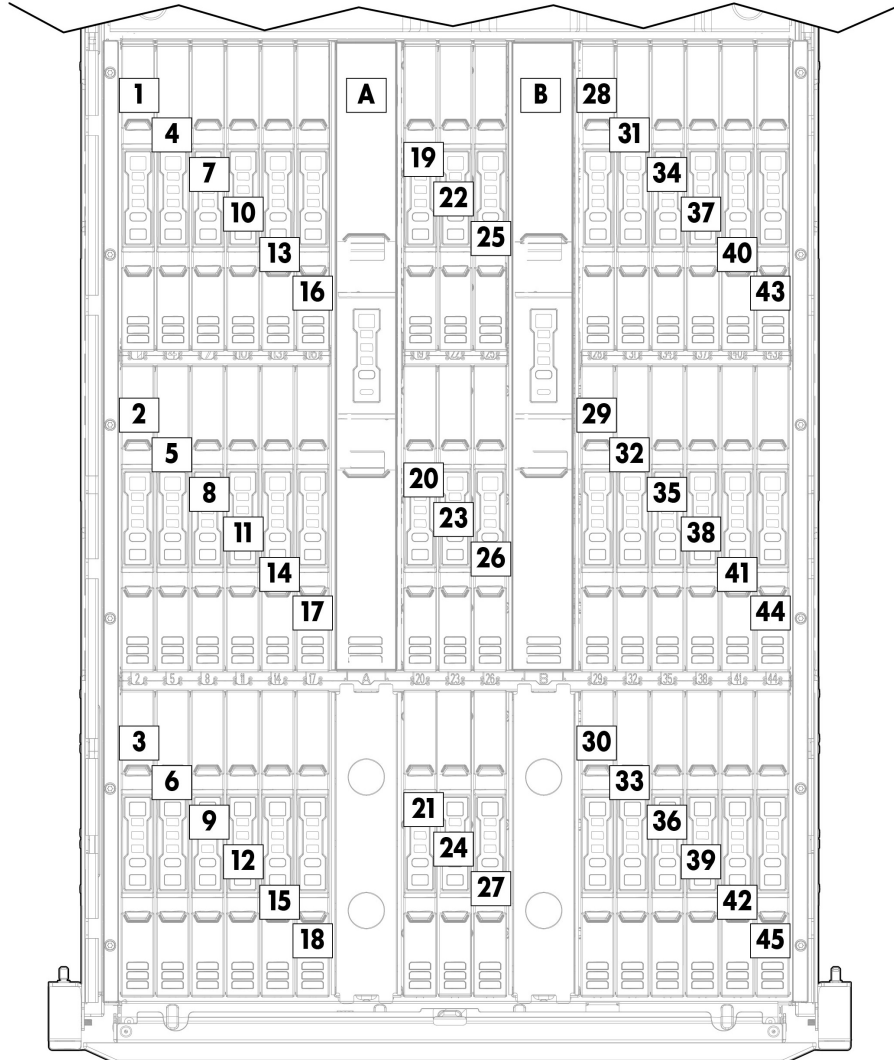
Power Supply Specifications

To review typical system power ratings use the HP Power Advisor which is available via the online tool located at URL: www.hp.com/go/hppoweradvisor.

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

Technical Specifications

Cartridge slot and switch module bay identification
The chassis provides 45 cartridge slots (1-45) and two switch module bays (A-B).



NOTE: Factory Integrated Models must start with an HP Moonshot 1500 Chassis. Each Moonshot 1500 Chassis will be ordered with minimum configurations of fifteen (15) identically configured HP Moonshot server cartridges per chassis.

System Unit

HP Moonshot 1500 Chassis Dimensions
(H x W x D)

7.47 x 17.45 x 35.34in (18.96 x 44.33 x 89.97cm)

NOTE: Rack chosen is required to have 1200mm to provide space for cable management arm at the rear of the chassis and host PDU in the rear of the rack.

Network Ports
(per switch & uplink pair)

The following network configurations can be supported by the Moonshot 1500 chassis based on the cartridges installed in the system:

Forty-five (45) 1 Gb Ethernet downlink ports with six (6) 10 Gb Ethernet SFP+ uplink ports

Technical Specifications

NOTE: See the HP Moonshot-45G Switch Module QuickSpec for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/14732_div/14732_div.html

NOTE: See the HP Moonshot-6SFP Uplink Module QuickSpec for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/14734_div/14734_div.html

One hundred eighty (180) 1 Gb Ethernet downlink ports with four (4) 40 Gb Ethernet QSFP+ uplink ports

NOTE: See the HP Moonshot-180G Switch Module QuickSpec for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/14731_div/14731_div.html

NOTE: See the HP Moonshot-4QSFP+ Uplink Module QuickSpec for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/14733_div/14733_div.html

Weight (approximate)	Maximum (all hard drives, power supplies, and processors installed)	180 lbs.
Input Requirements (per power supply)	Rated Line Voltage	180 to 264 VAC
	Rated Input Current	8.4A at 200VAC 7.0A at 240VAC
	Rated Input Frequency	47 to 63 Hz
	Rated Input Power	1661W at 200VAC 1649W at 240VAC
Power Supply Output (per power supply)	1500W	
Power Specifications	To review typical system power ratings use the HP Power Advisor which is available via the online tool located at URL: www.hp.com/go/hppoweradvisor	
System Inlet Temperature	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).

Technical Specifications

Relative Humidity (non-condensing)	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.
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).
Emissions Classification (EMC)	FCC Rating	Class A
	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.	

HP Moonshot 1500 Chassis Management Module

CPU	4x (400 MHz ARM 926)
Memory	4x (16 MB Flash)
	4x (256MB DDR 3)
Network	1Gbps/switch, 1 port
USB	N/A
Video	No Video - N/A
DVR Color	N/A
NAND Storage	16 GB
	<ul style="list-style-type: none"> ● 1GB for Active Health System (AHS) ● 1GB for Firmware Repository (iLO holding firmware images to flash components of the Chassis and cartridges) ● 1GB (birth certificate) ● 13GB reserve

Technical Specifications

**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: <http://www.hp.com/go/green>. 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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