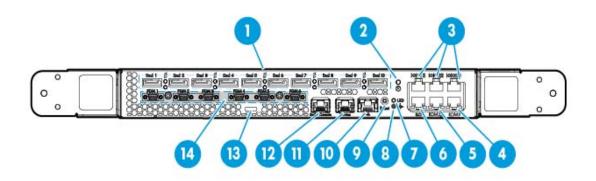
Overview

HP Advanced Power Manager

The HP Advanced Power Manager is a rack level solution for the HP Apollo 6000, HP ProLiant SL6500, SL4500, SL2500, and HP Moonshot1500 System. HP APM will automatically discover hardware components and enable bay level power on and off, server metering, aggregate dynamic power capping, configurable power-up dependencies and sequencing, consolidated Ethernet access to all resident iLOs, and asset management capabilities.

HP APM features rack level event logging, RADIUS authentication, integrated serial concentrator, up to 11 local user accounts, read only service port, and supports SNMP, SSH, Syslogd, telnet.



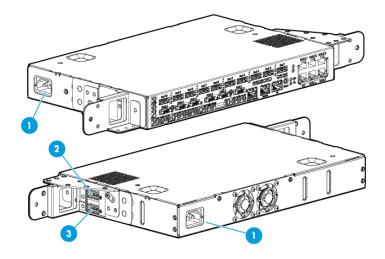
Front View:

- Consolidated Management Ports 1 10 (RDM1)
- Power LED
- 3. Serial port for management of top of rack switch
- 4. RDM 3 port for SL-APM Distribution module
- 5. RDM 2 port for SL-APM Distribution module
- 6. iLO port
- 7. UID LED
- 8. Health LED
- 9. Reset Button
- 10. Ethernet Management port
- 11. Service port
- 12. Serial Console port
- 13. Micro SD Card slot*
- 14. Power Distribution Module (PDM) ports 1 6



^{*}Future enablement

Overview



Back View/Side View

- 1. Power plugs 1 and 2
- 2. On-Generator and AUX signals
- 3. Redundant reset



Standard Features

Warranty

This product is covered by a global limited warranty and supported by HP Services and a worldwide 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.

NOTE: Server Warranty includes 1 year Parts, 1 year Labor, 1-year on-site support with next business day response. Additional information regarding worldwide limited warranty and technical support is available at: http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html.



Optional Features

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 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

Support for HP Advanced Power Manager is covered by the support for the server installed in the same rack.

HP Technology Services

HP Technology Services offers you consultants and support experts to solve your most complex infrastructure problems. We help keep your business running, boost availability and avoid downtime.

Protect your business beyond warranty with HP Care Pack Services

When you buy HP Options, it's also a good time to think about what level of service you may need. HP Care Pack services provide total care and support expertise with committed response choices designed to meet your IT and business need.

Recommended HP Care Pack Services for optimal satisfaction with your HP product

Recommended Services

Support for the HP APM is provided by the servers installed in the rack. Consider the criticality of the servers and choose the recommended service level that meets your needs.

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. Supplies and consumable parts will not be provided as part of this service; standard warranty terms and conditions apply. Parts and components that have exceeded their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual or the technical product data sheet will not be provided, repaired or replaced as part of this service.

For more information

To learn more on services for your HP server, contact your HP sales representative or authorized channel partner Or visit: http://www.hp.com/go/scalable



741192-B21

741192-B21

620002-B21

QuickSpecs

Configuration Information

NOTE: Contact your local sales representative for information on configurable product offerings and requirements.

Configuration Example 1

Appropriate for chassis with consolidated management port such as HP Apollo a6000 chassis.

HP Advanced Power Manager HP Advanced Power Manager Kit

NOTE: Each HP APM can connect up to 10 chassis via consolidated management

cable.

HP 4M Consolidated management Cable 762048-B21

NOTE: 1 cable per chassis.

HP 3M Micro DB9 to Micro DB9 Cable (PDM Cable) 762049-B21

NOTE: This cable is required for connectivity to DC Power shelf.

Configuration Example 2

Appropriate for chassis with SL APM/RDM port such as s6500.

HP Advanced Power Manager HP Advanced Power Manager Kit

NOTE: Each HP APM can connect to 2 HP SL Advanced Power Manager Distribution

(SL APMD) modules.

HP SL Advanced Power Manager Distribution module (SL APMD) Kit

NOTE: Each SL APMD can connect up to 10 chassis.



Technical Specifications

System Unit Chassis Dimensions 1.625" x 8.25" x 13" (4.128 x 20.95 x 33.02cm)

9 lbs

 $(H \times W \times D)$

Weight (approximate)

Input Requirements (per power supply)

Rated Line Voltage 100 to 240 VAC **Rated Input Current** 1.0A at 115VAC

1.0A at 230VAC 50 to 60 Hz

Rated Input Frequency

Rated Input Power 12W (at 100 VAC). 12W (at 200 VAC)

Power Specifications To review typical system power ratings use the HP Power Advisor which is

available via the online tool located at URL:

http://www8.hp.com/us/en/products/servers/solutions.html?compURI=1439951

653.10W (at 100 VAC), 653.08W (at 200 VAC)

System Inlet Temperature

Relative Humidity

Acoustic Noise

Operating

Operating

50° to 140° F (10° to 60° C) at sea level with an altitude derating of 1.8°F per every 1000 ft (1.0°C per every 305 m) above sea level to a maximum of 10,000 ft (3050 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).

-22° to 185° F (-30° to 85° C) Non-operating

> Maximum rate of change is 36°F/hr (20°C/hr). 10% to 90% relative humidity (Rh), 82.4°F (28°C)

(non-condensing) 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 (3050 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

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

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

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

N/A LWAd

N/A LpAm

Operating

LWAd N/A



Technical Specifications

N/A LpAm

Emissions FCC Rating Class A Classification (EMC) **Normative Standards**

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 and Recycling

End-of-life Management 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.



Summary of Changes

Date	Version History	Action	Description of Change:
10-June-2014	From Version 5 to 6	Changed	Changes made on Introduction Message, Images, Care Pack Services, Configuration Examples.
18-Apr-2014	From Version 4 to 5	Changed	Recommended and Related Services were revised.
17-May-2013	From Version 3 to 4	Changed	Correction made to the North America and Canada versions only.
10-May-2013	From Version 2 to 3	Changed	Overview: Updated Image section.
			Configuration Information-Factory Integrated Models: Updated Step 1.
05-Jun-2012	From Version 1 to 2	Changed	Changed the title.



Summary of Changes

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