

### Overview

The HP Serial Console Servers provide remote access to up to 16 or 48 direct attached devices. The HP serial consoling solution utilizes CAT5 UTP cables to connect to any serially managed device, facilitating cable routing and allowing for field termination of cable lengths. An adapter is used to convert the serial signal to RJ45.

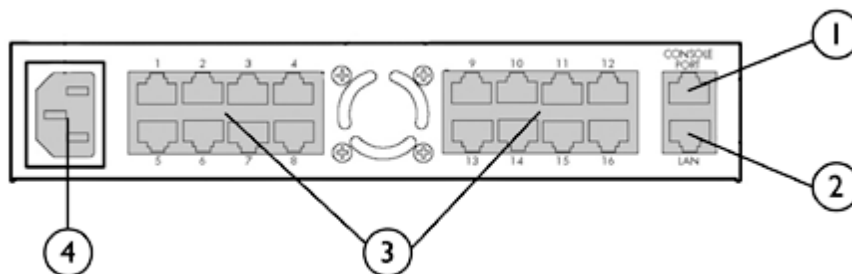
The HP Serial Console Servers provide remote access to headless servers such as those running UNIX, Linux or Microsoft Windows 2003 with EMS as well as serial managed devices such as network switches and routers from any workstation on the network or a local terminal.

HP Serial Console Servers are available in two models to support either 16 or 48 attached devices or servers through a single IP address using any SSH or telnet client.

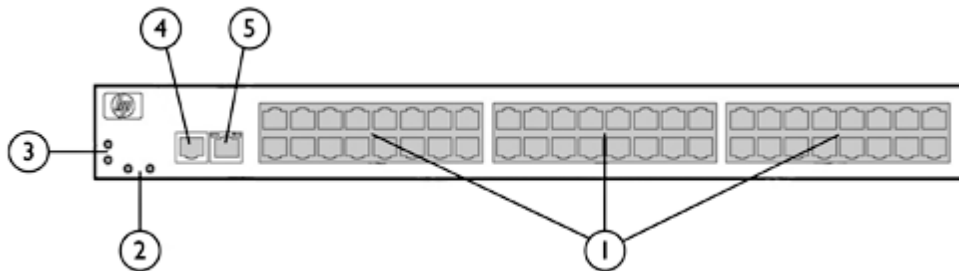
Security for servers is controlled by user names, passwords, and access rights configured and stored in non volatile memory in the Serial Console Server for up to 64 users or through RADIUS.

Up to two 16 Port Serial Console Servers or one 48 Port Serial Console Server can be mounted in a single "U" of rack space.

#### 16-Port Serial Console Server



#### 48-Port Serial Console Server



#### 16 - Port Serial Console Server

1. RJ45 Serial Console Connector
2. RJ45 Network Connection
3. RJ45 Ports for Devices
4. AC Power Connection

#### 48 - Port Serial Console Server

1. RJ45 Ports for Devices
2. Reset Buttons
3. Indicator Lights
4. RJ 45 Serial Console Connector
5. RJ45 Network Connection

## Models

### HP Serial Console Servers

HP 16-Port Serial Console Server

AF101A

HP 48-Port Serial Console Server

AF102A

### Product Features

#### Target Applications and Markets

- **24/7 data centers**
  - The Serial Console Server enables staffed data centers to move people out of computer rooms while still maintaining server accessibility. Technicians can access servers or devices from their local work station through a LAN/WAN connection.
- **Staffed remote sites**
  - The Serial Console Server provides users with access to local console functions over their LAN or WAN. Remote users can access servers or devices and perform actions as if they are standing at a local console.
- **Heterogeneous environments**
  - The Serial Console Server connects to any type of server or serially managed device that has a standard DB9 or DB25 serial connection.

#### Customer Challenges/Requirements

- Easy access to multiple serial managed devices and headless servers
- Want to move people out of the computer rooms due to cold temperatures and noise, but still need access
- Require increased density of devices per switch
- Somewhat price sensitive to cost per port
- Multi-platform management from one console (Microsoft® Windows, Linux, UNIX®, Serial Devices (etc))
- Non-intrusive control and management of servers and devices. HP Serial Console Servers are "out-of-band," allowing activity to be viewed on multiple systems without interfering in any way

#### Features

- High performance serial console. From outside the data center, IT administrators can manage servers and devices from a centralized console as if standing in front of them.
- Non-blocking architecture supports simultaneous connections to all serial ports.
- 1U space saving design. Up to two 16 Port Serial Console Switches or one 48 Port Serial Console Switch in a single U of rack space. Compatible with third party Telnet and SSHV2 clients and ready to install in your current environment.
- Improved cable management. Standard CAT5 UTP network cables can be field terminated to custom lengths eliminating heavy cables often found in the back of racks and improves airflow.
- Multi-level authentication through local security database or RADIUS
- Extensive command set to easily configure, control, and display information about the Serial Console Servers' operating environments.
- Port buffer holds the most recent 64KB of online and offline serial data and can be configured to write port data to a NFS server.
- Console port allows direct connection to the Serial Console Server for local access and configuration.
- 16-Port Serial Console switch connects at 10 or 100 Mbps to LAN.
- 48-Port Serial Console Server connect at 10, 100 Mbps to LAN.
- Redundant fans on 48 Port Serial Console Server.

### *Service and Support, HP Care Pack, and Warranty Information*

HP Care Pack services provide a range of life cycle support options that let you choose the service levels that meet your business requirements, from basic to mission-critical.

**NOTE:** Limited warranty is 3 year parts only

A full range of HP Care Pack hardware and software services are available including:

- Installation and start up
- Education courses
- Extended onsite hardware coverage hours from same business day 13 hours, 5 day to 24 hours, 7 days call window with options including 4-hour response or 6-hour Call To Repair
- Comprehensive range of software technical support for Microsoft, Linux, ProLiant Essentials and VMware-based IT solutions helping to deliver high level of application availability. Response times range from 30 mins for critical problems to 2 hours.
- System Management, Performance Services and Mission Critical Support Solution

HP Care Pack Services include HP branded hardware options qualified for the server, purchased at the same time or afterwards, internal to the enclosure, as well as 22" and smaller external monitors and tower UPS options up to 3KVA. 22" and smaller external monitors will be covered at the same service level and coverage period as the server. For servers or storage systems installed within a rack, service also covers all HP qualified rack options installed within the same rack.

**NOTE:** For more information on HP Care Pack services, contact any of our worldwide sales offices or resellers or visit our worldwide Web site on the internet at: <http://www.hp.com/hps/carepack>

**NOTE:** For more complete information on HP Services offerings, customers and resellers, please visit us at: <http://www.hp.com/hps>

**NOTE:** Additional information regarding worldwide limited warranty and technical support is available at: <http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>

**NOTE:** For additional information on Server Services, Rack and Power Options, please visit: <http://h20219.www2.hp.com/services/cache/111072-0-0-225-121.html>

**NOTE:** The information contained herein is subject to change without notice and is provided "as is" without warranty of any kind.

**NOTE:** The warranties for HP products and services are set forth in the express limited warranty statements accompanying such products and services.

**NOTE:** Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

### Related Options

<b>HP Serial Console Servers Accessories</b>	Serial Adapter, RJ45-DB9 DCE Female, 1 Pack	AF103A
	Serial Adapter, RJ45-DB9 DTE Male, 1 Pack	AF105A
	Serial Adapter, RJ45-DB25 DCE Male, 1 Pack	AF106A
	Serial Adapter, CAT5 RJ45-DB25 DTE Male, 1 Pack	AF107A
	Serial Adapter, CAT5 RJ45-DB25 DCE Female, 1 Pack	AF108A
	Serial Adapter, CAT5 RJ45-DB25 DTE Female, 1 Pack	AF109A
	Serial Adapter, RJ45-DB9 DCE Female, 8 Pack	AF110A
	Serial Adapter, RJ45 for Cisco, 1 Pack	AF104A
<b>CAT5 UTP Cable Kits - Unshielded Category 5e cables with RJ45 connectors</b>	CAT5e Cable 3', 4 pack	263474-B21
	CAT5e Cable 6', 8 pack	263474-B22
	CAT5e Cable 12', 8 pack	263474-B23
	CAT5e Cable 20', 4 pack	263474-B24
	CAT5e Cable 40', single pack	263474-B25
<b>Service and Support Offerings (HP Care Pack Services)</b>	Hardware Installation (Electronic)	U2871E

### Technical Specifications

#### HP Serial Console Server

		<b>16 Port</b>	<b>48 Port</b>
<b>Dimensions</b>	Height	1.72 in (4.37 cm)	1.72 in (4.37 cm)
	Width	8.75 in (22.23 cm)	17.5 in (44.45 cm)
	Depth	8 in (20.32 cm)	10 in (25.40 cm)
	Weight	5 lb (2.3 kg)	9 lb (4.08 kg)
<b>Input Power Requirements</b>	Rated Voltage	100 to 240V AC	100 to 240V AC
	Rated Frequency	50 to 60 Hz	50 to 60 Hz
	Rated Input Current	0.5A	1A Maximum
	Rated Frequency	50 to 60 Hz	50 to 60 Hz
	Power Input	45W Maximum	90W Maximum
	Heat Output	102 BTU/hr (max)	205 BTU/hr (max)
	Power Cables	Low Voltage IEC C13/Nema 5-15P and High Voltage IEC C13/14	Low Voltage IEC C13/Nema 5-15P and High Voltage IEC C13/14
	<b>Temperature Range</b>	Maximum Ambient Operating Temperature	32° to 104° F (0° to 40° C)
Ambient Storage and Shipping Temperature		-4° to 149° F (-20° to 65° C)	-4° to 158° F (-20° to 70° C)
<b>Relative Humidity</b> (non-condensing)	Operating	10% to 90%	10% to 90%
<b>Number of users</b>		16 concurrent	48 concurrent
<b>Number of Devices</b>		16 Maximum	48 Maximum
<b>Form Factor</b>	1U	Up to 2 units can be mounted on shelf (included)	1U
<b>Network requirements</b>	10 or 100 Mbps TCP/IP	1 IP address required	1 IP address required
<b>Data Transfer Security</b>	Secure Shell	SSHV2	SSHV2
<b>Connections</b>	Device Ports	16 RJ-45 Serial Ports	48 RJ-45 Serial Ports
	Console Port	1 RJ-45 Serial Port	1 RJ-45 Serial Port
	Network Connection	1 RJ-45	1 RJ-45
	Serial Console Server to Adapters	Category 5e UTP with RJ-45 connectors	Category 5e UTP with RJ-45 connectors
<b>Category 5 UTP Cables</b>	Available lengths	3 ft, 6ft, 12 ft, 20ft and 40ft	May also be field terminated to custom lengths.
	Connections	RJ45 on both ends	

### Technical Specifications

**Environment-friendly End-of-life Management Products and Approach 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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