

### Overview

#### Models

HP Server Console Switches	1X8-Port KVM	336044-B21
	2X16-Port KVM	336045-B21
CAT5e Cables	3 Foot (1 m) – 4 pack	263474-B21
	6 Foot (2 m) – 8 pack	263474-B22
	12 Foot (4 m) – 8 pack	263474-B23
	20 Foot (6 m) – 4 pack	263474-B24
	40 Foot (12 m) – 1 pack	263474-B25
Interface Adapters	PS/2 Interface Adapter – 1 pack	262588-B21
	PS/2 Interface Adapter – 8 pack	262587-B21
	USB Interface Adapter – 1 pack	336047-B21
Expansion Module	Console Switch Expansion Module	262589-B21
HP Care Pack Services	13x5, 4-Hour Response On-Site Coverage - 3 Years	FM-CV135-36
	24x7, 4-Hour Response On-Site Coverage – 3 Years	FM-CV724-36
	Hardware installation	FM-CVINS-IN

#### Introduction

HP Server Console Switches are key components for rack mount implementations (a **console** represents one keyboard, video monitor, and mouse (KVM) attached to a server). The family of HP Server Console Switches allows multiple servers in a rack to be accessed and managed by one keyboard, monitor, and mouse. By using a console, as many as 128 computers running different operating systems can be managed. The 8-Port and 16-port Server Console Switches feature an On-Screen Display (OSD) interface, which has intuitive menus for accessing each attached computer. Servers can be identified by a user-defined name or sequentially by number, enabling easy access to connected servers.

HP Server Console Switches can be connected in a tiered fashion, to increase server access from eight servers to as many as 128 servers. (256 servers if tiering to an HP IP Console Switch) Switching between computers is accomplished by typing a switching command at the keyboard, or by using the mouse to interact with the graphic interface of the selected computer via the OSD.

The HP Server Console Switch family of products is available in 8- and 16-Port versions. The 8-Port model offers single console support via the local user port, while the 16-port version offers dual console support, allowing the flexibility of controlling switch configurations from more than one location, or by more than one user. Standard rack mounting of the HP Server Console Switches will take up 1U (1.75 ) of front panel rack space. However, the Switches can also be mounted in a "zero U" profile by mounting in the side rails of the rack, or behind the HP 1U Keyboard Drawer or the 1U TFT5600 Keyboard/monitor drawer.

#### Target Applications and Markets

Network Administrators, System Administrators, Engineering Managers, Chief Information Officers, and Managers of Information Systems are all among the users who will see very tangible benefits from using the HP family of server console switches.

- Easy access to multiple servers (any server with PS/2 or USB I/O connection port)
- Multi-platform management from one console (Microsoft® Windows®, Novell, UNIX®, Linux etc)
- Non-intrusive control and management of servers HP Server Console Switches are "**out-of-band**," allowing server activity to be viewed on multiple systems without interfering in any way.

### Overview

### Features

- **On-Screen Display (OSD)** – Displays system-related information on the console monitor, such as selected server name, status, power-up test data and configuration menus.
- **Programmable Scanning** – An evaluation of system performance can be made by sequentially scanning any or all of the computers in the system. Programmable scanning allows you to determine which computers to include as well as the duration of the connection.
- **Configuration NVRAM** – NVRAM (non-volatile RAM) makes it easy to set configuration information using commands entered from the keyboard. The NVRAM stores the resulting configuration until a user decision is made to change the information, even if the unit loses power.
- **Password Protection** – For protection against unauthorized users, the switch box provides a password option for security purposes.
- **Switch Firmware Update** – The application code of the switch can be quickly and easily updated via FLASH ROM. The port communications settings are automatically configured to allow direct downloading from the connected computer.
- **Multiple Space Saving OU Installation Methods** –
  - Side Mount - Rails are provided for mounting the unit to the side of rack cabinets with side mounting capability.
  - Rear Rack Mount - HP Console Switches may be mounted behind a HP Integrated Keyboard and Drawer (257054-XXX), the TFT5110R rack monitor or the TFT5600 rack mounted keyboard and monitor with slide rails are provided with the switch.

### Which Model is Best?

#### Single-user console switches

The single-user HP Server Console Switches has one input (or user) port for one user console (one keyboard, monitor, and mouse) and multiple output (or system) ports for connecting multiple systems to the switch (one-to-many).

- One user has control over multiple computers with a single user switch.
  - Single user switches can also be tiered (one switch connected to another) via dedicated ARI port to expand the amount of systems controlled by one user without sacrificing an additional server port.
  - Expansion modules .....
- For example, an 8-port switch uses one of its output system ports to connect to another 8-port switch, yielding a total amount of 16 computers controlled by one user).

**Models** HP Server Console Switch, 1X8-Port KVM

366044-B21

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#### Multi-user console switches

The multi-user server console switch has two user ports for multiple user consoles, and multiple system ports as well (many-to-many). The multi-user console offer expanded flexibility, such as the following scenarios:

- Simultaneous control of servers in both the data center and in other remote locations.
- If there are multiple network administrators, a multiple console switch allows each of them to access all of the servers in their data center to diagnose problems, all from separate locations.

**Models** HP Server Console Switch, 2X16-Port KVM

366045-B21

### Technical Specifications

HP Server Console Switch 1x8	Dimensions	Height	1.72 in (4.36 cm)	
		Width	17 in (43.8 cm)	
		Depth	6 ½ in (16.51 cm)	
		Weight	4.5 lb (2.04 kg)	
	Input Power Requirements	Rated Voltage	100 to 240V AC	
		Rated Frequency	50 to 60 Hz	
		Rated Input Current	0.5 to 0.25A	
		Rated Frequency	50 to 60 Hz	
	Temperature Range	Maximum Ambient Operating Temperature	50° to 122° F (10° to 50° C)	
		Ambient Storage and Shipping Temperature	86° to 140° F (30° to 60° C)	
		Operating Temperature	50° to 122° F (10° to 50° C)	
	Temperature	Transit	-22° to 140° F (-30° to 60° C)	
		Storage	-4° to 140° F (-20° to 60° C)	
		Operating	20% to 80%	
Relative Humidity (non-condensing)	Operating	20% to 80%		
	Non-operating	5% to 90%		
Video Modes Supported	VGA, SVGA, XGA			
HP Server Console Switch 2x16	Dimensions	Height	1.72 in (4.36 cm)	
		Width	17 in (43.8 cm)	
		Depth	6 ½ in (16.51 cm)	
		Weight	4.5 lb (2.04 kg)	
	8-Port		5.7 lb (2.59 kg)	
	Dual Console 8-Port			5.7 lb (2.59 kg)
		Rated Voltage	4-Port, 8-Port, Dual Console 8-Port AC	100 to 240V AC
	Input Power Requirements	Rated Frequency	4-Port, 8-Port, Dual Console 8-Port AC	50 to 60 Hz
		Rated Input Current	4-Port, 8-Port, Dual Console 8-Port AC	1 to 0.5A
		Rated Voltage	Dual Console 8-Port DC	48V DC
		Rated Frequency	Dual Console 8-Port DC	N/A
	Temperature Range	Maximum Ambient Operating Temperature	50° to 104° F (0° to 40° C)	
		Ambient Storage and Shipping Temperature	-40° to 185° F (-40° to 85° C)	
		Maximum Internal Rack Temperature for the Switch Box	122 ° F (50° C)	
Relative Humidity (non-condensing)		Operating	20% to 80%	
	Non-operating	5% to 90%		

### Technical Specifications

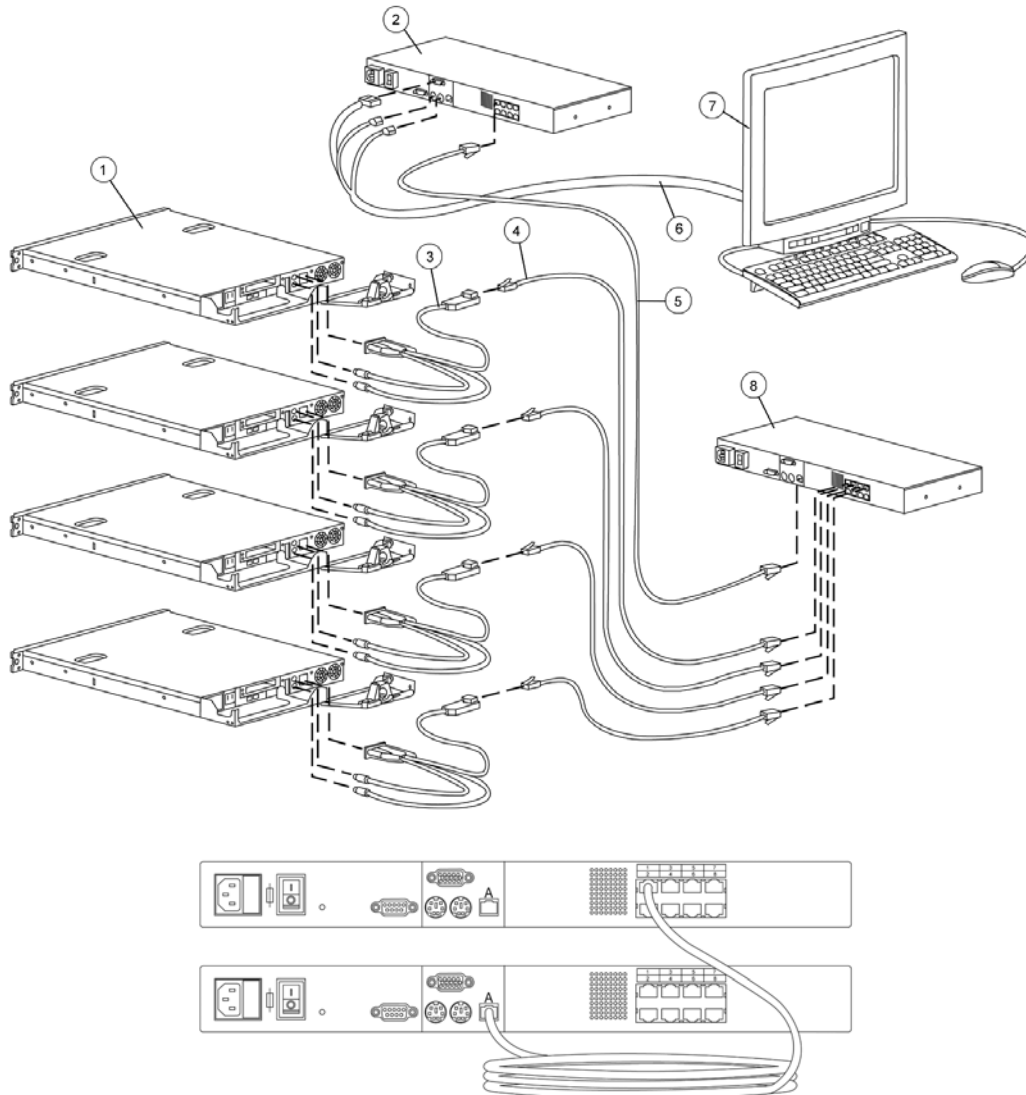
**CAUTION:** Do not use Interface Adapters to cascade HP KVM Server Console Switches with HP KVM Server Console Switches. If Interface Adapters are used to cascade these products, undesirable operations might occur.

**NOTE:** An optional Expansion Module can be added to the HP KVM Server Console Switch system, increasing the total number of accessible servers, only one level of tiering is allowed and implementing an Expansion Module is considered one level.

**NOTE:** To perform a firmware upgrade for a cascaded HP KVM Server Console Switch and all attached Interface Adapters; you must locally connect the keyboard, monitor, and mouse to the cascaded HP KVM Server Console Switch to access the local OSD.

**NOTE:** The HP KVM Server Console Switch does not support Compaq KVM PCI Cards or HP legacy console switches.

#### Example of an HP KVM Server Console Switch Cascade Configuration

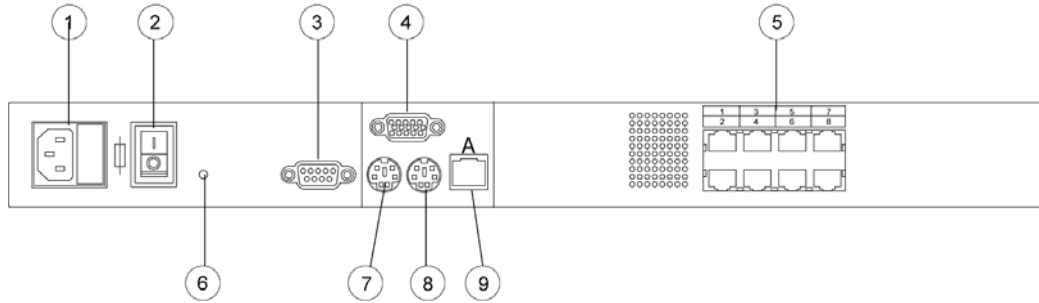


1. Server
  2. Main HP KVM Server Console Switch
  3. PS/2 Interface Adapter or USB Interface Adapter\*
  4. UTP CAT5 cable
- \* not shown

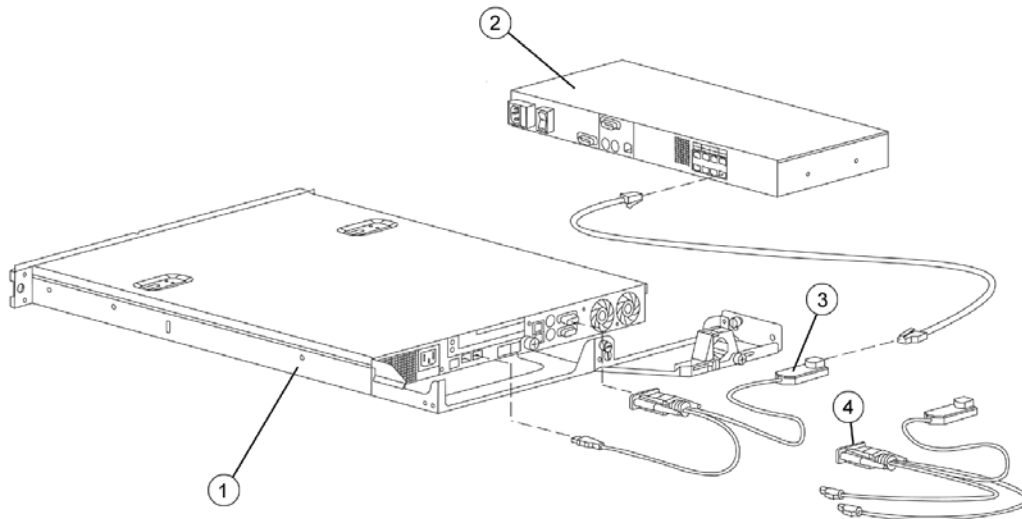
5. UTP CAT5 cable
6. KVM cable
7. Local port
8. Cascaded HP KVM Server Console Switch

### Technical Specifications

#### Components



1. Power connector
2. Power switch
3. Serial download connector
4. Monitor connector
5. Server connection ports
6. Activity indicator light
7. Keyboard connector
8. Mouse connector
9. RJ-45 Interface port (designated by the letter A)



1. Server
2. HP KVM Server Console Switch
3. USB Interface Adapter
4. PS/2 Interface Adapter

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