

### Overview

### HPE KVM Analog Console Switches

Looking for a simple and intuitive solution that allows you to access and manage servers across your entire network?

HPE KVM Analog Console Switches allow you to view and manage up to 256 rackmount servers across your data center through a single user interface. HPE KVM Analog Console Switches utilize a local On-Screen Display (OSD) interface, accessed through a rack console such as the HPE LCD8500, which provides intuitive menus for accessing each attached server or serial managed device. HPE's G3 KVM Analog Console Switches support an optional USB Remote Access Key that allows you to upgrade to KVM-over-IP functionality, providing remote access and management via the On-Board Web Interface (OBWI). New G3 models also support HPE Power Discovery Services and Location Discovery Services when connected to the appropriate power distribution unit and KVM rack console.

HPE KVM Analog Console Switches are available in 8 and 16-Port versions. Standard rack mounting of the KVM Analog Console Switch will share 1U (1.75") of front panel rack space with the rack console. However, each model can also be mounted in a "zero U" profile by mounting in the side rails of the rack.

### Why do you need a KVM Analog Console Switch for your rack?

- Local access to each server from the data center floor via a KVM Analog Console.
- Remote, out-of-band access to all connected servers in the data center.
- Local and remote access to a mixed IT environment where more than one brand of server is in use.

### Why HPE?

- HPE Care Pack services purchased for servers and storage extend to our rack and power infrastructure products such as racks, power distribution units, uninterruptible power systems, and KVM console switches.

**What is the Hewlett Packard Enterprise advantage for you?** You don't have to spend additional budget to cover extended warranties and services for your rack and power infrastructure as you would with non-Hewlett Packard Enterprise products.

- HPE rack and power infrastructure products are designed and developed to be used specifically with Hewlett Packard Enterprise servers and storage.

**What is the Hewlett Packard Enterprise advantage for you?** You can use HPE rack and power products with non-HPE IT equipment; however, when used with Hewlett Packard Enterprise servers, you are able to take advantage of various server and IP-based tools used for maintaining and managing all the equipment in the rack.

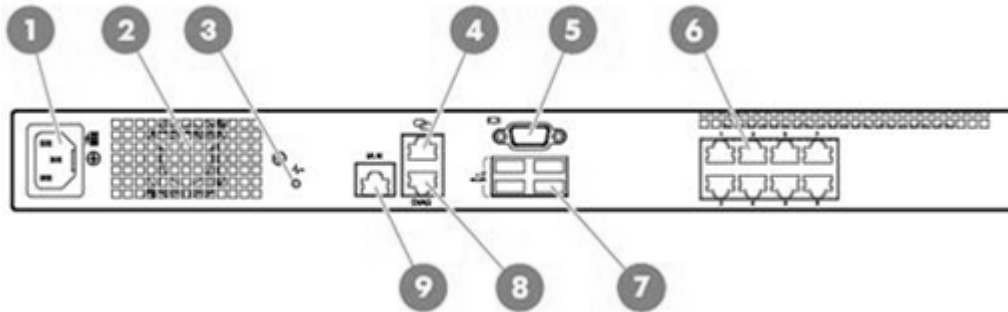
- While you have many choices for rack and power infrastructure products, Hewlett Packard Enterprise offers an extensive range of rack, power, and KVM products to meet all your needs.

**What is the Hewlett Packard Enterprise advantage for you?** Hewlett Packard Enterprise can help to simplify IT purchasing, installation, usage, and maintenance for your organization by providing a single point of contact for all your

## Overview

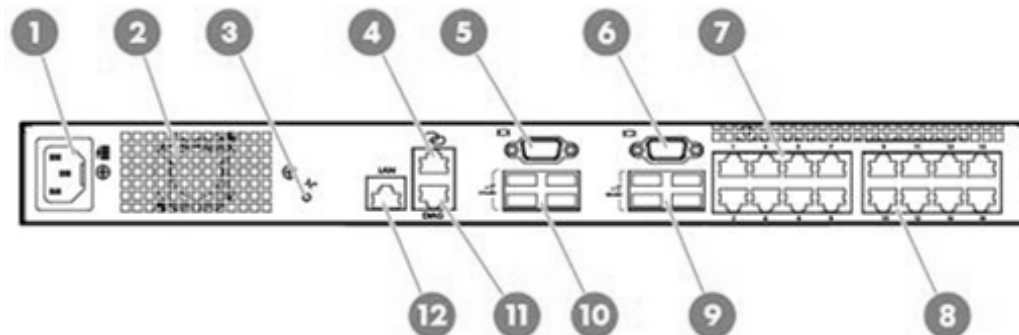
needs.

### HPE 0x1x8 G3 KVM Analog Console Switch



- |                                 |                                |
|---------------------------------|--------------------------------|
| 1. Power cord connector         | 6. Server connection ports 1-8 |
| 2. Fan                          | 7. Console port USB ports      |
| 3. System health LED            | 8. DIAG port                   |
| 4. RJ-45 tiering port           | 9. LAN port                    |
| 5. Console port video connector |                                |

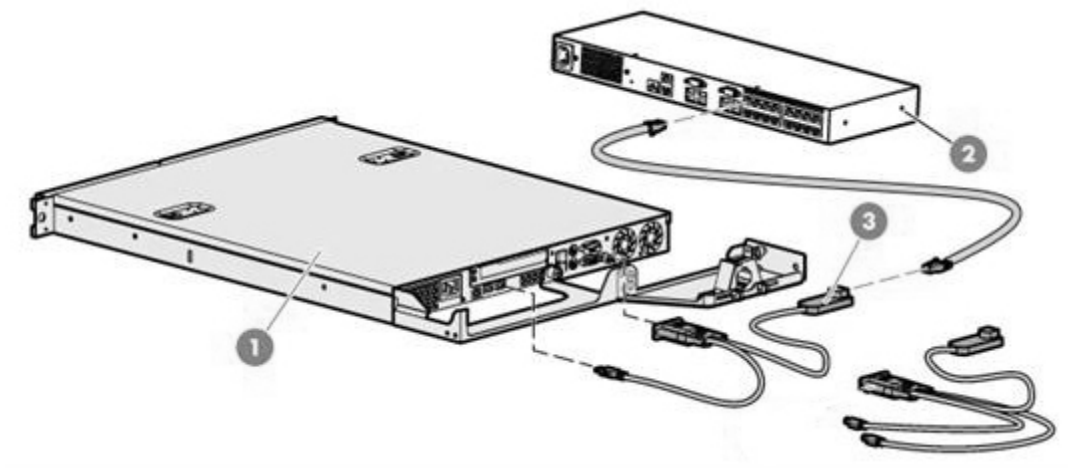
### HPE 0x2x16 G3 KVM Analog Console Switch



- |                                   |                                 |
|-----------------------------------|---------------------------------|
| 1. Power cord connector           | 7. Server connection ports 1-8  |
| 2. Fan                            | 8. Server connection ports 9-16 |
| 3. System health LED              | 9. Console port B USB ports     |
| 4. RJ-45 tiering port             | 10. Console port A USB ports    |
| 5. Console port A video connector | 11. DIAG port                   |
| 6. Console port B video connector | 12. LAN port                    |

## Connecting the Console Switch to the Interface Adapter (IA) on a Server

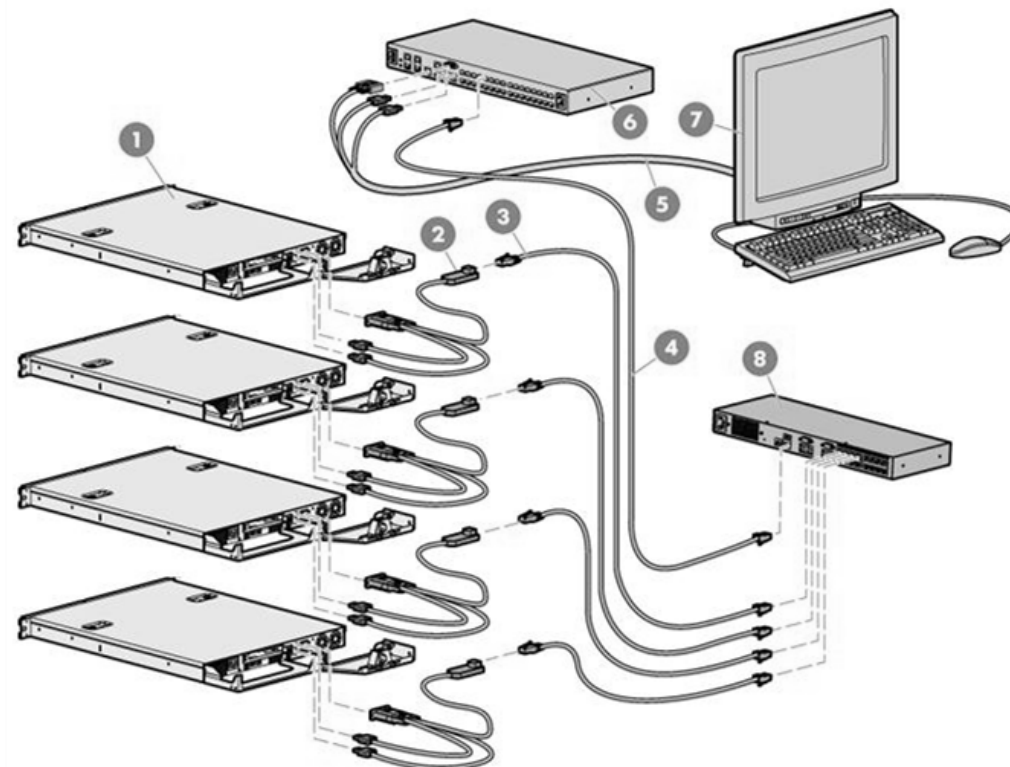
## Overview



- 1. Server
- 2. Console Switch

- 3. USB Interface Adapter (IA)

## Using HPE KVM Analog Console Switch in a Cascaded Configuration



- 1. Server
- 2. Interface Adapter (IA)
- 3. UTP CAT5 cable or higher
- 4. UTP CAT5 cable or higher

- 5. KVM cable
- 6. Main HPE IP Console Switch
- 7. Local port
- 8. Cascaded HPE KVM Server Console Switch

Models

Models

HPE G3 KVM Analog Console Switches	HP 0x1x8 G3 KVM Console Switch	AF651A
	HP 0x2x16 G3 KVM Console Switch	AF652A

What’s in the box

- Each KVM Console Switch ships with the following items:
- (1) KVM Analog Console Switch
  - (1) Rack-mounting hardware kit
  - (1) DB9-RJ45 adaptor
  - (1) Power Cord (US)
  - (1) Power jumper cable (Worldwide)
  - (1) Documentation kit

## Standard Features

### 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.
- **Remote Access upgrades** – use the USB Remote Access Key (AF650A) to activate remote access capabilities, turning your analog switch into a digital switch.
- **On-Board Web Interface (OBWI)** – built in web server providing remote management of the KVM.
- **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.
- **HPE Power Discovery Services (PDS)** – integrated support for HPE PDS when connected to an HPE Intelligent PDU (iPDU).
- **HPE Location Discovery Services (LDS)** – integrated support for HPE Location Discovery services (LDS) when connected to the HPE LCD8500 Rackmount KVM Console.
- **Password Protection** – For protection against unauthorized users, the switch box provides a password option for security purposes.
- **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 - HPE Console Switches may be mounted behind an HPE rack mounted keyboard and monitor with slide rails provided with the switch.
- **Support for variety of server connections with Interface Adapters**
  - PS/2
  - USB
  - VT 100 serial console support
  - BladeSystems support via front diagnostics connector

---

### Multi-user console switches

The multi-user KVM 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.

## HPE Server Support

### HPE ProLiant Server Support

All HPE ProLiant servers running any operating system are supported on all HPE Server Console Switches.

### HPE Integrity Server Support

Integrity Server support is dependent on operating system and hardware configurations. For systems capable of displaying VGA graphics the USB Interface Adapter (PN: AF628A) may be used. Some Integrity Servers may require an optional graphics adapter. With some operating systems the Serial Interface Adapter (PN: 373035-B21) may be connected to the RS-232 management port to provide VT100 terminal emulation through the HPE Server Console Switch.

### HPE Unix Server Support

HP9000 Servers can be managed using the Serial Interface Adapter (PN: 373035-B21) connected to the RS-232 management port to provide VT100 terminal emulation through the HPE Server Console Switch.

**NOTE:** For additional information on supported options for the HPE Integrity and HP9000 Servers please consult the HP9000, Integrity and carrier-grade servers Configuration Guide.

---

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

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

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

## Service and Support

### Service and Support

**NOTE:** HPE KVM Server Console Switch is supported as a part of the HPE Server Infrastructure. No separate HPE Care Packs need to be purchased.

#### **HPE Technology Services for Industry Standard Servers**

HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to Hewlett Packard Enterprise to help prevent problems and solve issues faster. Our support technology lets you to tap into the knowledge of millions of devices and thousands of experts to stay informed and in control, anywhere, any time.

Protect your business beyond warranty with HPE Care Pack Services

HPE Care Pack Services enable you to order the right service level, length of coverage and response time as you purchase your new server, giving you full entitlement for the term you select.

---

### For more information

To learn more on services for HPE ESSN Options, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit:

**<http://www.hp.com/services/proliant>** or **<http://www.hp.com/services/bladesystem>**

Related Options

Related Options

Remote Access Key	HP USB Remote Access Key for G3 KVM Console Switches	AF650A
CAT5e Cables	HP 3ft Qty 4 KVM CAT5 Cable	263474-B21
	HP 6ft Qty 8 KVM CAT5 Cable	263474-B22
	HP 12ft Qty 8 KVM CAT5 Cable	263474-B23
	HP 20ft Qty 4 KVM CAT5 Cable	263474-B24
	HP 40ft Qty 1 KVM CAT5 Cable	263474-B25
Interface Adapters	HP BladeSystem c-Class KVM Interface Adapter	AF605A
	HP KVM Console USB Interface Adapter	AF628A
	HPE KVM Console USB/Display Port Interface Adapter	AF654A
	HPE KVM Console USB 8-pack Interface Adapter	AF655A
	HP KVM CAT5 1-pack Serial Interface Adapter	373035-B21
HPE Foundation Care	HPE Install Rack and Rack Options Service	U2871E

## Technical Specifications

<b>Server Console Port Analog Switches</b>	<b>Dimensions</b>	<b>Height</b>	1.72 in (4.36 cm)
		<b>Width</b>	17 in (43.8 cm)
		<b>Depth</b>	6 ½ in (16.51 cm)
		<b>Weight</b>	4.6 lb (2.04 kg)
	<b>Power Requirements</b>	<b>Rated Voltage</b>	100 to 240V AC
		<b>Rated Frequency</b>	50 to 60 Hz
		<b>Rated Input Current</b>	0.5A
		<b>Output Power</b>	20W (max)
		<b>Inrush Current</b>	60A max @ 120 VAC cold start
	<b>Temperature</b>	<b>Heat</b>	79 BTU/hr (max)
		<b>Operating</b>	32° to 122° F (0° to 50° C)
		<b>Transit</b>	-22° to 140° F (-30° to 60° C)
		<b>Storage</b>	-4° to 140° F (-20° to 60° C)
	<b>Relative Humidity</b> (non-condensing)	<b>Operating</b>	20% to 80%
		<b>Non-operating</b>	5% to 95%
	<b>Video Modes Supported</b> VGA, SVGA, XGA		

### CAT 5 Cable lengths and Video Resolution Restrictions

	<b>1280 x 1024</b>	<b>1024 x 768</b>	<b>800 x 600</b>
50 ft (15m) cable length	Y	Y	Y
75 ft (22m) cable length	-	Y	Y
100 ft (30m) cable length	-	-	Y

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

## Summary of Changes

Date	Version History	Action	Description of Change
31-Mar-2016	From Version 25 to 26	Added	Added new interface adapters.
		Changed	Overview, Models, and Related Options were revised.
		Removed	HPE G2 KVM Analog Console Switches section was removed from the QuickSpecs.
09-Feb-2015	From version 24 to 25	Added	Added new G3 models
		Changed	Title was changed from HPE KVM Server Console Switch to HPE KVM Analog Console Switches.  Overview, Models, Standard Features, HPE Server Support, Service and Support, Related Options, and Technical Specifications sections were revised.
18-Feb-2014	From Version 23 to 24	Changed	Interface Adapters was revised.
20-Nov-2013	From Version 22 to 23	Changed	The title has changed.
20-Sep-2013	From Version 21 to 22	Removed	Removed a Note from the Overview section.
20-Jun-2011	From Version 20 to 21	Changed	Changes were made throughout the QuickSpecs.
16-Feb-2011	From Version 19 to 20	Changed	Service and Support Offerings was changed to HPE Care Pack in Service and Support, HPE Care Pack, and Warranty Information, What's New was removed from the Overview and Serial Interface Adapter, 1-pack with power supply was removed from Interface Adapters.
25-Nov-2009	From Version 18 to 19	Changed	HPE Server console switch 0x2x8 was added to Multi-user console switches and Single-user console switches was removed.
16-Nov-2009	From Version 17 to 18	Added	HPE TAA Server console switch 0x2x16 was added.
27-Apr-2009	From Version 16 to 17	Changed	Changes were made to the What's New, Models, and Which Model is best? sections.
10-Nov-2008	From Version 15 to 16	Changed	Changed the Multi-user Console Switches Part Number from 366045-B21 to 336045-B21.
11-Jan-2008	From Version 14 to 15	Removed	Removed the Expansion Module from the Related Options section.
28-Dec-2007	From Version 13 to 14	Removed	Removed AF100A.
05-Sep-2007	From Version 12 to 13	Added	Added the Environment-friendly Products and Approach object to the Technical Specifications section.
13-Feb-2007	From Version 11 to 12	Changed	Changed the Single-user Console Switch Part Number.
12-Feb-2007	From Version 10 to 11	Changed	Changes made within the What's New, Related Options, Features and the HPE Server Support sections.
20-Mar-2006	From Version 9 to 10	Changed	Minor changes made in all sections except TECHNICAL SPECIFICATIONS.
13-Jan-2006	From Version 8 to 9	Changed	Minor change made in OVERVIEW - Features (Multiple Space Saving OU Installation Methods) and HPE SERVER SUPPORT - HPE Unix Server Support.
26-Sep-2005	From Version 7 to 8	Changed	Minor formatting changes made throughout the QuickSpecs.
08-Apr-2005	From Version 6 to 7	Added	Added Care Pack Installation P/N's. Added Output Power, Heat and CAT 5 Cable lengths and Video Resolution Restrictions to Technical Specifications.
13-Dec-2004	From Version 5 to 6	Changed	Every section of this QuickSpecs was revised except for Technical Specifications. The images were moved above the

## Summary of Changes

			Service and Support section.
06-Aug-2004	From Version 4 to 5	Changed	This QuickSpecs has been completely revised, including format and content.
23-Mar-2004	From Version 3 to 4	Changed	Models  Corrected the part number for the USB Interface Adapter – 1 pack from 366047-B21 to 336047-B21.
18-Mar-2004	From Version 2 to 3	Changed	Technical Specifications  Corrected the callouts for the Components Image.
20-Nov-2003	From Version 1 to 2	Changed	Overview-Features Multiple Space Saving OU Installation Methods HPE Console Switches may be mounted behind a HPE 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.

Summary of Changes



Sign up for updates

★ Rate this document



© Copyright 2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

c04123433 - 11834 - Worldwide - V26 - 31-March-2016