Overview

HP KVM Analog Console Switches

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

HP KVM Analog Console Switches allow you to view and manage up to 256 rackmount servers across your data center through a single user interface. HP KVM Analog Console Switches utilize a local On-Screen Display (OSD) interface, accessed through a rack console such as the HP LCD8500, which provides intuitive menus for accessing each attached server or serial managed device. HP'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 HP Power Discovery Services and Location Discovery Services when connected to the appropriate power distribution unit and KVM rack console.

HP 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?

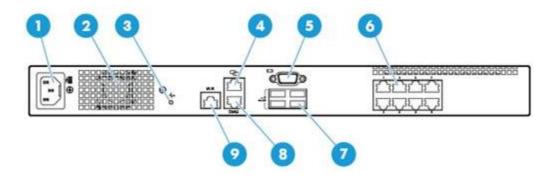
- Local access to each server from the data center floor via a KVM Analog Console.
- Remote, out-of-band access to all connected servers in the data center.
- Local and remote access to a mixed IT environment where more than one brand of server is in use.

Why HP?

- HP 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 HP 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-HP products.
- HP rack and power infrastructure products are designed and developed to be used specifically with HP servers and storage.
 - **What is the HP advantage for you?** You can use HP rack and power products with non-HP IT equipment; however, when used with HP 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, HP offers and extensive range of rack, power, and KVM products to meet all your needs.
 - **What is the HP advantage for you?** HP can help to simplify IT purchasing, installation, usage, and maintenance for your organization by providing a single point of contact for all your needs.

Overview

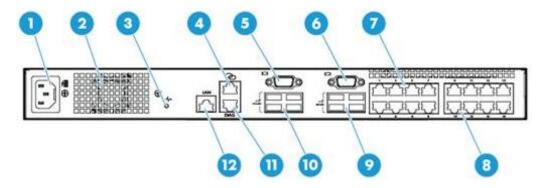
HP 0x1x8 G3 KVM Analog Console Switch



- 1. Power cord connector
- 2. Fan
- 3. System health LED
- 4. RJ-45 tiering port
- 5. Console port video connector

- 6. Server connection ports 1-8
- 7. Console port USB ports
- 8. DIAG port
- 9. LAN port

HP 0x2x16 G3 KVM Analog Console Switch



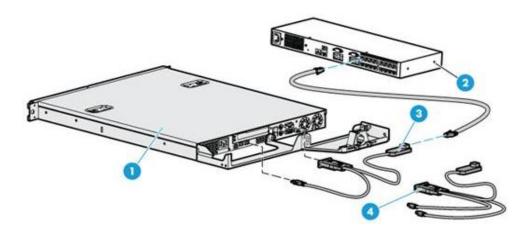
- 1. Power cord connector
- 2. Fan
- 3. System health LED
- 4. RJ-45 tiering port
- 5. Console port A video connector
- 6. Console port B video connector

- 7. Server connection ports 1-8
- 8. Server connection ports 9-16
- 9. Console port B USB ports
- 10. Console port A USB ports
- 11. DIAG port
- 12. LAN port



Overview

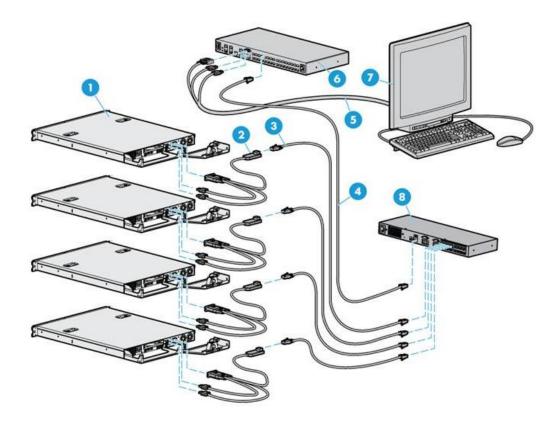
Connecting the Console Switch to the Interface Adapter (IA) on a Server



- 1. Server
- 2. Console Switch

- 3. USB Interface Adapter (IA)
- 6. PS/2 Interface Adapter (IA)

Using HP 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 HP IP Console Switch
- 7. Local port
- 8. Cascaded HP KVM Server Console Switch



Models

Models

| HP G3 KVM Analog Console Switches | HP 0x1x8 G3 KVM Console Switch | AF651A |
|--|--|-----------|
| | HP 0x2x16 G3 KVM Console Switch | AF652A |
| | HP TAA 0x2x16 G3 KVM Console Switch | AF653A |
| HP G2 KVM Analog Console Switches | HP Server Console 0x2x8 Port Analog Switch | AF616A |
| | HP Server Console 0x2x16 Port Analog Switch | AF617A |
| | HP TAA 0x2x16xKVM Server Console G2 Switch | AF626A |
| | THE THE ONEX TOXING SERVER CONSOLE GE SWITCH | 711 02071 |

Content Kits for G2/G3 Models

Each G2 and G3 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.
- HP Power Discovery Services (PDS) integrated support for HP PDS when connected to an HP Intelligent PDU (iPDU).
- **HP Location Discovery Services (LDS)** integrated support for HP Location Discovery services (LDS) when connected to the HP 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
 - o 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 an HP rack mounted keyboard and monitor with slide rails provided with the switch.
- Support for variety of server connections with Interface Adapters
 - o PS/2
 - o USB
 - o 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.



HP Server Support

HP ProLiant Server Support

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

HP 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 HP Server Console Switch.

HP 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 HP Server Console Switch.

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

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: 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.



Service and Support

Service and Support

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

HP Technology Services for Industry Standard Servers

HP Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to HP 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 HP Care Pack Services

HP 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.

HP Technology Services for Industry Standard Servers

HP Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to HP 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 HP Care Pack Services

HP 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 HP ESSN Options, please contact your HP sales representative or HP 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 | |
| | HP KVM CAT5 1-pack Serial Interface Adapter | 373035-B21 | |
| HP Care Pack Services | HP Install Rack and Rack Options Service | U2871E | |



Technical Specifications

| Server Console Port |
|----------------------------|
| Analog Switches |

Dimensions Height 1.72 in (4.36 cm) Width 17 in (43.8 cm) Depth 6 ½ in (16.51 cm)

Weight 4.6 lb (2.04 kg) **Rated Voltage** 100 to 240V AC **Rated Frequency** 50 to 60 Hz

Rated Input Current 0.5A **Output Power** 20W (max)

Inrush Current 60A max @ 120 VAC cold start

79 BTU/hr (max) Heat

Temperature Operating 32° to 122° F (0° to 50° C)

> **Transit** -22° to 140° F (-30° to 60° C) Storage -4° to 140° F (-20° to 60° C)

Operating **Relative Humidity** 20% to 80% (non-condensing) Non-operating 5% to 95%

Video Modes Supported VGA, SVGA, XGA

Power Requirements

CAT 5 Cable lengths and Video Resolution Restrictions

| | 1280 x 1024 | 1024 x 768 | 800 x 600 |
|---------------------------|-------------|------------|-----------|
| 50 ft (15m)cable length | Υ | Υ | Υ |
| 75 ft (22m) cable length | - | Υ | Υ |
| 100 ft (30m) cable length | - | - | Υ |

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: |
|-------------|-----------------------|---------|--|
| 09-Feb-2015 | From version 24 to 25 | Added | Added new G3 models |
| | | Changed | Title was changed from HP KVM Server Console Switch to HP KVM Analog Console Switches. |
| | | | Overview, Models, Standard Features, HP 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 QuickSpec. |
| 16-Feb-2011 | From Version 19 to 20 | Changed | Service and Support Offerings was changed to HP Care Pack in Service and Support, HP 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 | HP 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 | HP 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 HP 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 HP SERVER SUPPORT - HP Unix Server Support. |
| 26-Sep-2005 | From Version 7 to 8 | Changed | Minor formatting changes made throughout the QuickSpec. |
| 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 QuickSpec was revised except for Technical Specifications. The images were moved above the Service and Support section. |
| 06-Aug-2004 | From Version 4 to 5 | Changed | This QuickSpec 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. |



Summary of Changes

| 20-Nov-2003 | From Version 1 to 2 | Changed | Overview-Features Multiple Space Saving OU Installation Methods 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. |
|-------------|---------------------|---------|---|
|-------------|---------------------|---------|---|



Summary of Changes

© Copyright 2015 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice.

The only warranties for HP 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. HP shall not be liable for technical or editorial errors or omissions contained herein.

