

Overview

HPE KVM IP Console Switch

IT professionals who spend significant time in server rooms know the importance of a good quality KVM console switch with the features that you need to access your compute, storage, and networking hardware. With IT budgets constantly under pressure to do more with less there needs to be better utilization of existing IT assets, especially in dynamic virtual IT environment. By providing secure, remote access and control of your connected devices with the HPE KVM IP Console Switch, you can consolidate device management anywhere in the world while reducing operating and equipment costs

What's New

New Features:

- Secure remote access to the switch and connected devices, 2 factor authentication via CAC, and VM access to install updates, perform maintenance, or power down connected devices
- Redundant remote access
- Video resolution supporting up to 1600 x 1200 on the local port
 - Widescreen video support modes include; 1680 x 1050, 1440 x 900, 1280 x 800, 1024 x 640, 800 x 500
- 1 local port and 1 tiering port
 - For digital appliances, the local ports will be represented by one tiering connection and one local KVM connection.
- Tiering up to 2 levels (base plus one lower level) through the Tiering port.

Why HPE?

What is the Hewlett Packard Enterprise advantage for you? While you have many choices for rack and power infrastructure products, HPE offers an extensive range of rack, power, and HPE KVM products to meet all your needs. What is the HPE advantage for you? HPE can help to simplify your IT purchasing, installation, usage, and maintenance for your organization by providing a single point of contact for all your needs. The HPE KVM products are designed and developed to be used specifically with HPE servers and storage, but can be used with non-HP IT equipment as well.

What's in the box

Each KVM IP Switch ships with the following items:

- (1) KVM IP Console Switch
- (1) Rack-mounting hardware kit
- (1) DB9-RJ45 adapter
- (1) Power jumper cable

Find the User Guide on hpe.com/info/rackandpower or on our Product Support Page

Models

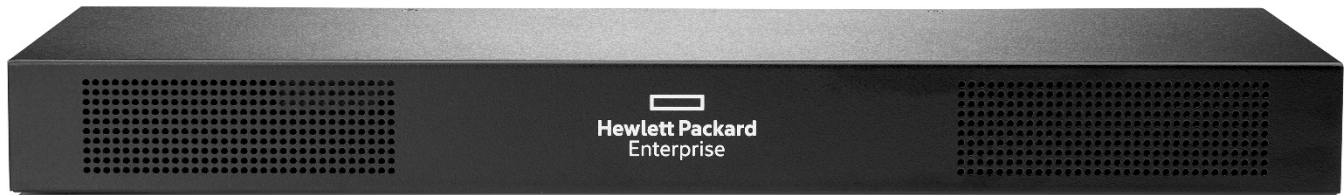
HPE KVM IP Console Server

HPE 1x1x8 G4 KVM IP Console Switch	Q1P54A
HPE 1x2x16 G4 KVM IP Console Switch	Q1P55A

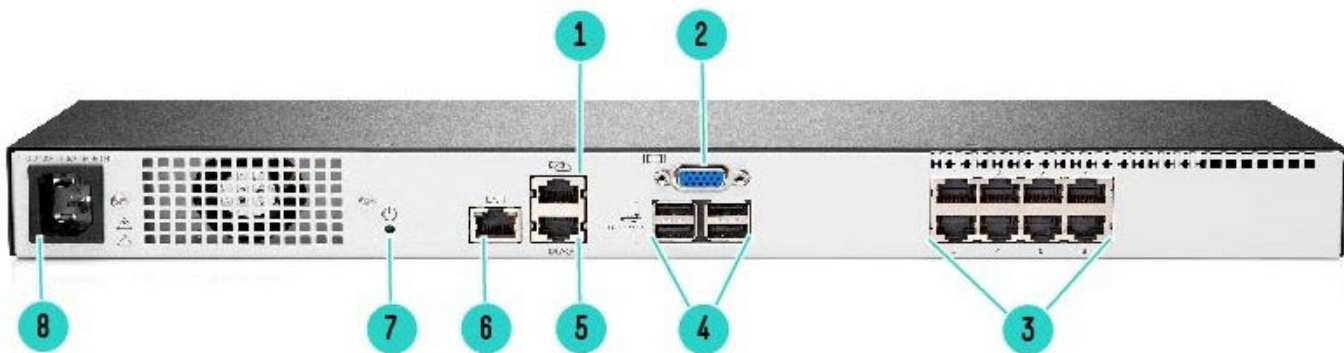
HPE KVM USB Adapter

HPE KVM Console SFF USB Interface Adapter	Q5T66A
HPE KVM Console SFF USB 8-pack Interface Adapter	Q5T67A

Overview

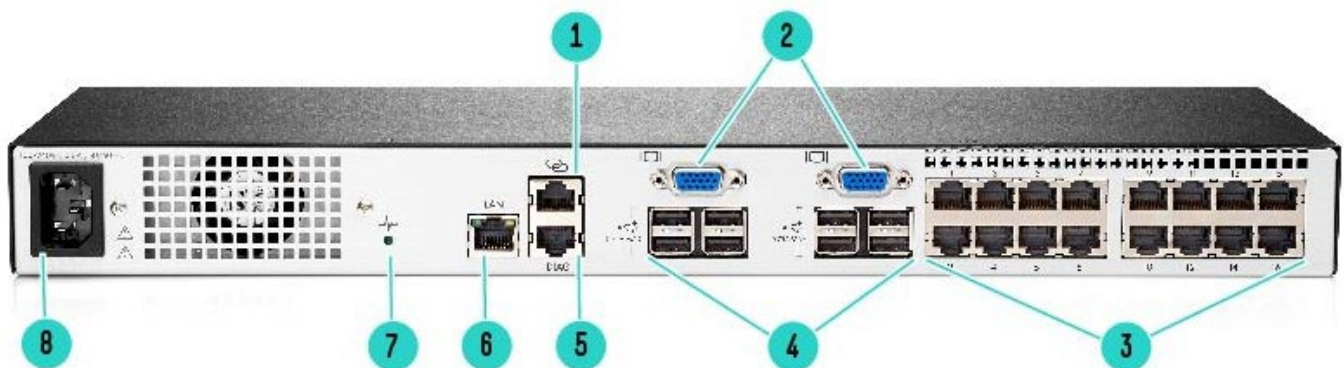


1x1x8 HPE G4 KVM IP Console Switch – Front View



1x1x8 G4 KVM IP Console Switch – Rear View

- | | |
|------------------------------|--------------------------------------|
| 1. Tiering port | 5. RJ-45 management port |
| 2. Console Port A VGA | 6. LAN 1 |
| 3. Target device ports (1-8) | 7. Power supply status indicator LED |
| 4. Console Port A USB ports | 8. Power Connector |



1x2x16 G4 KVM IP Console Switch – Rear View

- | | |
|-----------------------------------|--------------------------------------|
| 1. Tiering port | 5. RJ-45 management port |
| 2. Console Port A and B VGA | 6. LAN 1 |
| 3. Target device ports (1-16) | 7. Power supply status indicator LED |
| 4. Console Port A and B USB ports | 8. Power Connector |



Overview

XXXXXX-**X21** is SKU designation formed by a common six digit part number and a **-X21** suffix that identifies a SKU that is available across multiple server family lines. Refer to the table below to find the SKU suffix that applies to the specific server product line this option can be ordered with.

-B21	-H21	-K21
COMPUTE Server Line	SPECIALIZED COMPUTE Server Line	STORAGE Line
HPE Cloudline CL2100/CL2200/CL2800/CL3100/CL4100/CL5200/CL5800 Servers HPE Composable Cloud for ProLiant DL HPE ProLiant BL460c/BL660c Servers HPE ProLiant DL20/DL160/DL180 Servers HPE ProLiant DL325/DL360/DL380/DL385/DL560/DL580 Servers HPE ProLiant DX360/DX380 Servers HPE ProLiant MicroServer HPE ProLiant for Microsoft Azure Stack HPE ProLiant ML30/ML110/ML350 Servers HPE Synergy 480/660 Systems HPE ProLiant DX170r/DX190r, DX2000 Servers HPE ProLiant DX560 Gen10 server HPE ProLiant DX4200 Gen10 server	HPE Apollo 35/40/70 Systems HPE Apollo 2000/6000 Servers HPE XL170r/XL190r/XL270d (Apollo 6500) Gen10 Server for BlueData Software HPE Converged System 300/500/700/750 HPE Edgeline Systems and Servers HPE Integrity BL860c i6/BL870c i6/BL890c i6 Server Blades HPE Integrity MC990 X Server HPE Integrity rx2800 i6 Server HPE Integrity Superdome HPE SGI 8600 System HPE Solutions for SAP HANA (TDI)	HPE Apollo 4200 Gen9/Gen10 Servers HPE Apollo 4200 Gen10 LFF Server for BlueData Software HPE Apollo 4510 Gen10 System HPE D2220sb/D2500sb Storage Blade HPE D3000/D6020/D8000 Disk Enclosures HPE Scalable Object Storage with Scality RING HPE SimpliVity 2600 HPE SimpliVity 325/380 Gen10 HPE Storage File Controllers HPE StoreEasy 1460/1560/1650/1660/1860 Disclaimer: This may not be a complete listing of applicable servers



Standard Features

Target Applications and Markets

Network Administrators, System Administrators, Engineering Managers, Chief Information Officers, and Managers of Information Systems are all among the users who benefit from using the HPE family of console switches.

- 24/7 data centers - The HPE KVM IP Console Switch enables staffed data centers to move people out of computer rooms while still maintaining server accessibility. Technicians can load the IP Viewer software on their local workstation at a desk or cubicle and access the servers in the computer room through a LAN/WAN connection.
- Staffed remote sites - The HPE KVM IP Console Switch provides users with access to local KVM functions over their LAN or WAN. Remote users can access servers and perform actions as if they are standing at a local console.
- Heterogeneous environments - The HPE KVM IP Console Switch connects to any type of server that has a standard USB KVM connection and will also connect to BladeSystems and serial devices.

Features

- The HPE KVM IP Console Switch will support up to 2 users as 1 remote user and 1 local user.
- Full remote KVM functionality - Remote KVM control of servers and serially attached devices at near local performance.
- Remote and local virtual media:
 - Administrators can map local media on a workstation to a remote server in the data center or remote office to easily perform application installations or upgrades
 - A USB CD-ROM, USB DVD, USB floppy drive, or USB key can be attached directly to the HPE KVM IP Console Switch and mapped to an attached server
 - When used locally with the HPE LCD8500, USB drives can be connected to the front USB port on the Console for increased ease of use
 - Virtual media support requires the use of Virtual Media Interface Adapters
- Tiering support:
 - Two levels of cascading are available to support up to 256 servers. When all tiers are comprised of virtual media compatible console switches and interface adapters, virtual media can be mapped to a server on any tier
- iLO compatibility - Easily switch between remote KVM and iLO sessions directly from the IP Viewer software.
- Local Console OSD - Displays all system-related information on the console monitor.
- OBWL - Browser based access for management of the KVM Appliance and Interface Adapters as well as initiating a remote console session with a managed device.
- 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 appliance provides a local password option for security purposes as well as individual user authentication and access rights for remote users.
- Switch Firmware Update - The application code of the switch can be quickly and easily updated via FLASH ROM. Updates can be accomplished remotely over the LAN using the OBWL.
- Multiple rack configurations supported:
 - Front or Rear Horizontal Rack Mount - can be installed in any standard 19" rack U slot using the provided mounting hardware;
 - Shared 1U rack space - HPE KVM IP Console Switches may be mounted behind an HPE LCD8500 1U Rackmount KVM Console or any other KVM console that supports rear side mounting in a shared 1U space
 - Side Mount - use optional rails for mounting the unit to the side of rack between the RETMA rails (only supported on HPE rack enclosures)
- DVD virtual media support
- Supports existing HPE Interface Adapters, backward compatible.
- Dual-stack IPv6 with stateless auto configuration
- HPE BladeSystem c-Class KVM Interface Adapter available for BladeSystem c-Class servers.
- Video support:
 - Video compression allows 1600x1200 @ 60hz or 1680 x 1050 @ 60hz 16-bit color for remote sessions without impacting performance



Standard Features

- Capable of higher resolutions at increased cable distances
- Improved security:
 - CAC support to the server
 - Keyboard, video, mouse and virtual media activity can be fully encrypted using 128-bit SSL, AES, supported encryption algorithms for remote sessions
 - Remote console sessions to the data center can be shared by other remote users. Stealth mode can also be used by administrators to monitor remote sessions without announcement.
- LDAP included:
 - Microsoft Active Directory integration using LDAP is standard
 - Local security database on switch is also available for non LDAP implementations
- IP Viewer 4.1 software:
 - Supports HPE IP Console Switch with Virtual Media, HPE IP and Server Console Switches, HPE Serial Console Servers, and legacy Cat5 based HPE IP Console Switches
 - Supports remote virtual media sessions
 - Compatible with Windows and Linux clients
- No software to install on target servers

Notes: For more information please visit <https://www.hpe.com/us/en/integrated-systems/rack-power-cooling.html>.

Tiering Configurations

Tiering is the ability to connect one or more switches under a single switch at the top as in a pyramid. Tiering allows an administrator to access larger numbers of servers from a single local or remote console. The HPE KVM IP Console Switch will support up to 2 levels of tiering under certain conditions

- HPE KVM IP Console Switch may be cascaded to KVM switches with Virtual Media or any Cat5 based HPE KVM IP Console Switch by connecting a Cat5 cable from a server port on the top switch to the dedicated tiering port on the switch below. Interface adapters are not needed to cascade HPE KVM IP Console Switch.
- Virtual media can be mapped to servers on any tier but only if the server is connected to a HPE KVM IP Console Switch using a Virtual Media Interface Adapter. Virtual media operation requires a Virtual Media Interface Adapter connected to a HPE KVM IP Console Switch with Virtual Media.
- An HPE KVM IP Console Switch cannot be tiered under a legacy Cat5 based HPE Server Switch.
- To perform a firmware upgrade for a tiered HPE KVM IP Console Switch and all attached Interface Adapters; you must connect directly to the tiered HPE KVM IP Console Switch On-Board Web Interface (OBWI).

Notes: For more information on cascading HPE KVM IP Console Switch, please visit: <https://www.hpe.com/us/en/integrated-systems/rack-power-cooling.html>



Service and Support

HPE Services

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

<https://www.hpe.com/services>

Consulting Services

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.

<https://www.hpe.com/services/consulting>

HPE Managed Services

HPE runs your IT operations, providing services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

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Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.

<https://www.hpe.com/services/operational>

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

<https://www.hpe.com/services/completecure>



Service and Support

HPE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service delivers a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.

<https://www.hpe.com/services/techcare>

HPE Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to:

<https://www.hpe.com/services/lifecycle>

For a list of the most frequently purchased services using service credits, see the [HPE Service Credits Menu](#)

Other Related Services from HPE Services:

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.

<https://www.hpe.com/services/training>

Defective Media Retention

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.



Service and Support

Parts and Materials

HPE will provide HPE-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.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

How to Purchase Services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at <https://ssc.hpe.com/portal/site/ssc/>

AI Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent.

<https://support.hpe.com/hpesc/public/home/signin>

Consume IT On Your Terms

HPE GreenLake edge-to-cloud platform brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake edge-to-cloud platform accelerates digital transformation in a distributed, edge-to-cloud world.

- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE"

<https://www.hpe.com/us/en/contact-hpe.html>

For more information

<http://www.hpe.com/services>



Related Options



HPE KVM Console SFF USB Interface Adapter (Q5T66A)

Virtual Media Interface Adapters

HPE KVM Console SFF USB Interface Adapter	Q5T66A
HPE KVM Console SFF USB 8-pack Interface Adapter	Q5T67A
HPE KVM Console USB 2.0 Virtual Media CAC Interface Adapter	AF629A
HPE KVM Console USB/Display Port Interface Adapter	AF654A

Non VM Interface Adapter

HPE KVM Console USB Interface Adapter	AF628A
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Notes: AF628A does not provide CAC and Virtual Media support.

Interface Adapters for Serial Connectivity

CAT5e Cables

HPE 6ft Qty 8 KVM CAT5 Cable	263474-B22
HPE 12ft Qty 8 KVM CAT5 Cable	263474-B23

HPE LCD8500 Console Kit

HPE LCD8500 1U US Rackmount Console Kit	AF630A
HPE LCD8500 1U UK Rackmount Console Kit	AF631A
HPE LCD8500 1U DE Rackmount Console Kit	AF632A
HPE LCD8500 1U FR Rackmount Console Kit	AF633A
HPE LCD8500 1U JP Rackmount Console Kit	AF642A
HPE LCD8500 1U RU Rackmount Console Kit	AF643A
HPE LCD8500 1U INTL Rackmount Console Kit	AF644A

HPE Tech Care

HPE Install Rack and Rack Options Service	U2871E
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Technical Specifications

HPE KVM IP Console Switch			
Dimensions	Height	1.72 in (4.36 cm)	
	Width	17 in (43.8 cm)	
	Depth	6.69 in (16.99 cm)	
	Weight	4.4 lb (2.0 kg)	
Power Requirements	Rated Voltage	100 to 240V AC auto-sensing (auto-switching)	
	Rated Frequency	50 to 60 Hz	
	Rated Input Current	0.5 to 0.25A	
	Input Power	100W (max)	
	Inrush current	30A max. @ 120VAC cold start	
		120VAC min.	379mA, 22.4W, 76.5btu
		120VAC max.	408mA, 24W, 81.9btu
		240VAC min.	257mA, 22.5W, 76.8btu
		240VAC max.	273mA, 24W, 81.9btu
	Heat	340 BTU/hr (max)	
Temperature Range	Maximum Ambient	32° to 140° F (0° to 50° C)	
	Operating Temperature		
	Ambient Storage and Shipping Temperature	-4° to 158° F (-20° to 70° C)	
Temperature	Operating	32° to 140° F (0° to 50° C)	
	Transit	-4° to 158° F (-20° to 70° C)	
	Storage	-4° to 158° F (-20° to 70° C)	
Relative Humidity (non-condensing)	Operating	20% to 80%	
	Non-operating	5% to 95%	
Video Modes Supported		VGA input on KVM and VGA and Display port on the server	
Network Speed		10/100 Mb/s	
Connectors	Ports	(8) or (16) CAT-5 ports	
	Local Video Output	(1) or (2) HD-15	
	Local Keyboard Input	(1) or (2) USB	
	Local Mouse Input	(1) or (2) USB	
	Setup and Configuration Port	(1) RJ-45	
	Tiering	(1) RJ-45	
	Input Power	EN 60320 C14 receptacle for use with any detachable C13 equipped power cord	

CAT 5 Cable lengths and Video Resolution Restrictions

Standard 4x3				
Total Cable Length	1600X1200 1680x1050 @60hz	1280x1024 1280x800 @60Hz	1024x768 @60Hz	800x600 @60Hz
10'	X	X	X	X
50'		X	X	X
100'				X
Wide Screen 16x9 / 16x10				
Total Cable Length	1680x1050 @60Hz	1440x900 @60Hz	1280x800 @60Hz	800x500 @60Hz
10'	X	X	X	X
50'	X	X	X	X
100'				X



Technical Specifications

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

Hewlett Packard Enterprise offers end-of-life **product return, trade-in, and recycling programs**, in any geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE Directive (2012/19/EU) 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**.

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.



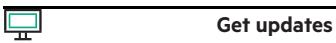
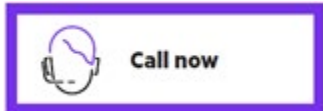
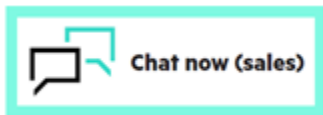
Summary of Changes

Date	Version History	Action	Description of Change
04-Dec-2023	Version 6	Changed	Service and Support Section was Updated
15-Nov-2021	Version 5	Changed	Service and Support Section was Updated
01-Jul-2019	Version 4	Changed	Technical specifications were updated.
01-Oct-2018	Version 3	Changed	Overview and Related Options were updated.
02-Jul-2018	Version 2	Changed	Overview Section was updated
02-Apr-2018	Version 1	New	New QuickSpecs



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