

Overview

HPE H240ar Smart Host Bus Adapter

The HPE H240ar Smart Host Bus Adapter is a 2 x4 internal ports flexible Smart HBA which provide customers with the flexibility and speed they have come to expect from HPE. The H240ar Smart HBA is ideal for internal connectivity to HDDs and SSDs that provides support for 12G SAS and 6G SATA drives. H240ar Smart HBA can also provide high performance for SSDs that do not require data protection. This SAS HBA is ideal for driving cost-effective and reliable scalability in today's data centers. The HPE H240ar can scale internal storage in the servers with the addition of HPE 12G SAS Expander card. The H240ar Smart Host Bus Adapter provides flexibility to run in HBA mode or simple RAID mode. When operating in simple RAID mode, it provides RAID 0, RAID 1, and RAID 5 with optional HPE Secure Encryption capabilities. Unlike the HPE Smart Array Controllers, the H240ar does not support cache modules for acceleration.



Model		
Host Bus Adapter	HPE H240ar 12Gb 2-ports Int Smart Host Bus Adapter	726757-B21

Kit contents	<ul style="list-style-type: none">• Flexible HPE H240ar Smart Host Bus Adapter	
---------------------	--	--

Standard Features

Key Features

- Storage interface (SAS/SATA)
 - 8 physical links across 2 x4 internal ports
 - 12Gb/s SAS, 6Gb/s SATA technology
 - Mix-and-match SAS and SATA drives to the same controller
 - Support for SAS tape drives, SAS tape autoloaders and SAS tape libraries
- PCI Express Gen3 x8 link
- RAID 0, 1, 5, 10
- Simple RAID or HBA mode
- Legacy and UEFI boot operation
- Up to 200 physical drives
- Up to 64 logical drives
- HPE Secure Encryption (optional license)
- Seamless upgrades to other HPE Smart Array P-series controllers
- Flexible Smart HBA (Daughter Card)
 - Dimensions: 5.3 x 3.56 x 1.23 in (13.46 x 9.04 x 3.12 cm)

Ports

Internal: 8 SAS/SATA physical links across 2 x4 internal ports

Performance

- 12Gb/s SAS (1200 MB/s theoretical bandwidth per physical lane)
- 6Gb/s SATA (600 MB/s theoretical bandwidth per physical lane)
- PCI Express Gen3 x8 link width

HPE Secure Encryption

HPE Secure Encryption is a Smart Array controller-based data encryption solution for ProLiant Gen9 servers that protects sensitive, mission critical data. This is an enterprise-class encryption solution for data at rest on any bulk storage attached to the HPE Smart Array controllers including data on the cache memory of the controller. HPE Secure Encryption is an optional license per server requiring encryption enablement (see Related Options for more information on the license).

The solution is available for both local and remote key management mode deployments. Local Key Management Mode is focused on single server deployment where there is one Master key per controller that is managed by the user. Remote Key Management Mode is for enterprise wide deployments from just a few servers to thousands of servers.

For more information please visit <http://www.hpe.com/servers/secureencryption>

Warranty

The warranty for this device is 1 year parts only.

Warranty Upgrade Options

- Response - Upgrade on-site response from next business day to same day 4 hours
- Coverage - Extend hours of coverage from 9 hours x 5 days to 24 hours x 7 days
- Duration - Select duration of coverage for a period of 1, 3, or 5 years
- Warranty upgrade options can come in the form of Care Packs, which are sold at the HPE System level this product attaches too

Compatibility

Server Support HPE ProLiant DL360 Gen9
HPE ProLiant DL380 Gen9

HPE ProLiant ML350 Gen9

Operating Systems Microsoft Windows Server
Microsoft Windows Hyper-V Server
VMware vSphere ESXi
Red Hat Enterprise Linux (RHEL)
SUSE Linux Enterprise Server (SLES)
Oracle Solaris
Oracle Linux
Canonical Ubuntu
CentOS
Wind River
Citrix XenServer

NOTE: For a complete and up-to-date list of certified and supported OS versions for HPE Smart Array controllers, please refer to the HPE Smart Array Operating System Support Matrix at: <http://www.hpe.com/h20195/v2/GetPDF.aspx/4AA6-6550ENW.pdf>

NOTE: For more information on HPE's Certified and Supported ProLiant Servers for OS and Virtualization Software, please visit our Support Matrix at: <http://www.hpe.com/info/ossupport>

Storage Management Software Suite

HPE Smart Storage Administrator (HPE SSA)
Comprehensive management for HPE Smart Storage products with advanced scripting and diagnostic features and simplified and intuitive interface and functionality. For more information please visit: <http://www.hpe.com/servers/ssa>

HPE Systems Insight Manager
Powerful server and server options/storage manager tool with configuration/diagnostic utilities

HPE Storage Management Utility
Offers the simplest method for configuring the storage system via Initial System Configuration Wizard

Service and Support

HPE Support Services

Protect your business beyond warranty with HPE Support Services. HPE Pointnext provides a comprehensive portfolio including Advisory and Transformational, Professional, and Operational Services to help accelerate your digital transformation. From the onset of your transformation journey, Advisory and Transformational Services focus on designing the transformation and creating a solution roadmap. Professional Services specializes in creative configurations with flawless and on-time implementation, and on-budget execution. Finally, operational services provides innovative new approaches like Flexible Capacity and Datacenter Care, to keep your business at peak performance. HPE is ready to bring together all the pieces of the puzzle for you, with an eye on the future, and make the complex simple.

Recommended Support

HPE Proactive Care* with 24x7 coverage, three year Support Service

HPE Proactive Care gives customers an enhanced call experience. When your products are connected to HPE, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This Service combines three years proactive reporting and advice with our 24x7 coverage, four hour hardware response time when there is a problem. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.) running on your HPE servers. <https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf>

HPE Proactive Care* with 6 hour call-to-repair commitment, three year Support Service

HPE Proactive Care gives customers an enhanced call experience. When your products are connected to HPE, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This Service combines three years' proactive reporting and advice with our highest level of hardware support - HPE's 24x7, six hour hardware call-to-repair. HPE is the only leading manufacturer who makes this level of coverage available as a standard service offering for your most valuable servers. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.) running on your HPE servers. <https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf>

*HPE Proactive Care and HPE Proactive Care Advanced require that the customer connect their devices to make the most of these services and receive all the deliverables.

HPE Education Services

Keep your IT staff trained making sure they have the right skills to deliver on your business outcomes. Book on a class today and learn how to get the most from your technology investment. <http://www.hpe.com/ww/learn>

HPE Support Center

The HPE Support Center is a personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with HPE experts, access support resources or collaborate with peers.

Learn more <http://www.hpe.com/support/hpesc>

HPE's Support Center Mobile App* allows you to resolve issues yourself or quickly

Service and Support

connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime.

HPE Insight Remote Support and HPE Support Center are available at no additional cost with a HPE warranty, HPE Support Service or HPE contractual support agreement.

**HPE Support Center Mobile App is subject to local availability*

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.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Related Services

HPE Server Hardware Installation

Provides for the basic hardware installation of HPE branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner.

<https://www.hpe.com/h20195/V2/GetPDF.aspx/5981-9356EN.pdf>

HPE Installation and Startup Service provides for the installation and startup of HPE technology including BladeSystems, C-Class enclosure, HPE ProLiant c-Class and Integrity server blades, storage blades, SAN switch blades, HPE Virtual Connect modules (Ethernet and Fibre Channel), Ethernet network interconnects, and InfiniBand, as well as the installation of one supported operating system type (Windows® or Linux).

NOTE: The Smart Array P408i-a SR Gen10 Controller is covered under the HPE Service Contract applied to the HPE ProLiant Server. No separate HPE support services need to be purchased.

- Warranty and Support Services will extend to include HPE options configured with your server or storage device. The price of support service is not impacted by configuration details. HPE sourced options that are compatible with your product will be covered under your server support at the same level of coverage allowing you to upgrade freely. Installation for HPE options is available as needed. To keep support costs low for everyone, some high value options will require additional support. Additional support is only required on select high value workload accelerators, fibre switches, InfiniBand and UPS batteries over 12KVA. See the specific high value options that require additional support [HERE](#).

Recommended and Extended Products

Recommended

Offering the best combination of performance, value and availability, Recommended Options have been selected by HPE experts to provide the right technology for a range of workloads and market segments. Fully integrated into the ProLiant management and security experience, Recommended Options provide the best fit with timely availability.

Service and Support

Extended

Extended Options provide an extended catalog of products tailored for customers in specific markets or with specific workloads, requiring the utmost in performance or value. Fully integrated into the ProLiant management and security experience, Extended Options represent great value and performance but typically have a longer lead-time.

This controller is an Extended Option.

Additional Service Information <http://www.hpe.com/services>

Related Options

HPE Smart Array SR Secure Encryption	HPE Smart Array Secure Encryption/Data at Rest Encryption/per Server Entitlement E-LTU NOTE: HPE Smart Array SR Secure Encryption licensing is based on the number of servers requiring encryption for direct attached storage. NOTE: For more information visit: http://www.hpe.com/servers/secureencryption	Q2F26AAE
---	--	----------

HPE Cable Options For a list of SAS cables for this controller, please refer to the HPE Smart Storage Cables compatibility matrix. <https://www.hpe.com/h20195/V2/GetDocument.aspx?docname=4AA5-4154ENW&cc=us&lc=en>

Environment friendly Products and Approach - End-of life Management and Recycling	Hewlett Packard Enterprise offers end-of-life <u>product return, trade-in, and recycling programs</u> , in many 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 <u>Hewlett Packard Enterprise web site</u> . 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
5-Feb-2018	Version 5	Changed	Replaced Secure Encryption SKU (C9A82AAE) with Q2F26AAE. Updated Service and Support.
23-Oct-2017	Version 4	Changed	Care Pack naming and Service and Support- Parts and Materials updated.
19-Aug-2016	Version 3	Changed	Overview, Standard Features, Compatibility, and Related options were revised.
28-Sep-2015	Version 2	Removed	Solaris references were removed from the QuickSpecs.
09-Sep-2014	Version 1	New	Initial version



© Copyright 2018 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.

Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries.

For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

c04346310 - 15045 - Worldwide - V5 - 5-February-2018

