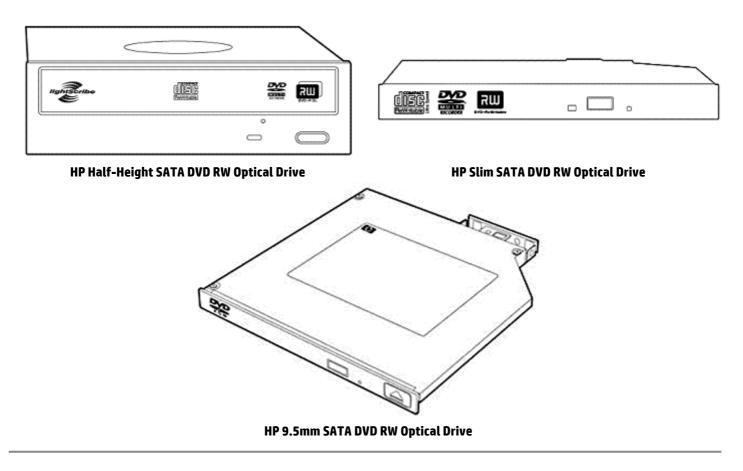
Overview

The HP SATA optical drives for HP ProLiant servers are offered with an industry-standard SATA interface and are supported on most major operating systems.

The DVD RW drive will be capable of reading DVD 4.7 GB through 8.5 GB media. It will also be able to read standard stamped, CD-R, and CD-RW media. This drive supports writing to CD-R, CD-RW, DVD +R/RW, and DVD -R/RW media via software utilities. For Microsoft[®] operating systems, this is available by installing the included Roxio software disk. For other operating systems, an operating system-specific software utility is required for writing to media.



What's New

• Updating list of supported servers.



Overview

Models

HP Half-Height SATA DVD RW JackBlack Optical Drive	624192-B21
HP 12.7mm Slim SATA DVD-RW JackBlack Optical Drive	652235-B2 ²
HP 9.5mm SATA DVD-RW JackBlack Optical Drive	652241-B2 ⁻
HP Half-Height SATA DVD-RW Optical Drive	447328-B2 ⁻
HP Slim 12.7mm SATA DVD-RW Optical Drive	481043-B2 ²
HP 9.5mm SATA DVD-RW Optical Drive	481047-B21

Kit Contents

- SATA DVD RW drive
- Installation guide
- Warranty card
- Roxio software disk
- SATA data and power cables

Product Features

• Higher capacity writable optical drive utilizing DVD and CD media

Compatibility

-	ProLiant ML (expansion-optimized):				
RW JackBlack Optical	HP ProLiant ML310e Gen8				
Drive	HP ProLiant ML310e Gen8 v2				
624192-B21	HP ProLiant ML350e Gen8				
	HP ProLiant ML350p Gen8				
	ProLiant MicroServer (Just Right First Server):				
	HP ProLiant MicroServer				
	NOTE: This is a list of supported servers. Some may be discontinued.				
HP 12.7mm Slim SATA DVD-RW JackBlack Optica	ProLiant DL (rack-optimized):				
Drive	HP ProLiant DL380e Gen8				
	HP ProLiant DL380p Gen8				
652235-B21	 HP ProLiant DL385p Gen8 				
	NOTE: This is a list of supported servers. Some may be discontinued.				
HP 9.5mm SATA DVD-RW	ProLiant DL (rack-optimized):				
JackBlack Optical Drive					
652241-B21	HP ProLiant DL160 Gen8				
	HP ProLiant DL320e Gen8				

- HP ProLiant DL320e Gen8 v2
- HP ProLiant DL360e Gen8
- HP ProLiant DL360p Gen8



Overview

ProLiant MicroServer:

• HP ProLiant MicroServer Generation 8 (Gen8) **NOTE:** This is a list of supported servers. Some may be discontinued.

HP Half-Height SATA DVD- ProLiant DL (rack-optimized):

RW Optical Drive

447328-B21

HP ProLiant DL370 G6

ProLiant ML (expansion-optimized):

- HP ProLiant ML110 G5
- HP ProLiant ML110 G6
- HP ProLiant ML110 G7
- HP ProLiant ML115 G5
- HP ProLiant ML150 G5
- HP ProLiant ML150 G6
- HP ProLiant ML310 G5p
- HP ProLiant ML330 G6
- HP ProLiant ML350 G5
- HP ProLiant ML350 G6
- HP ProLiant ML370 G6

NOTE: This is a list of supported servers. Some may be discontinued.

HP Slim 12.7mm SATA DVD-RW Optical Drive	ProLiant DL (rack-optimized):
481043-B21	 HP ProLiant DL120 G5
	 HP ProLiant DL180 G5
	 HP ProLiant DL180 G6
	 HP ProLiant DL320 G5p
	 HP ProLiant DL370 G6
	 HP ProLiant DL380 G6
	 HP ProLiant DL380 G7
	 HP ProLiant DL385 G5p
	 HP ProLiant DL385 G6
	 HP ProLiant DL385 G7
	 HP ProLiant DL580 G5
	 HP ProLiant DL580 G7
	 HP ProLiant DL585 G7

• HP ProLiant DL980 G7

ProLiant ML (expansion-optimized):

• HP ProLiant ML370 G6

NOTE: This is a list of supported servers. Some may be discontinued.

HP 9.5mm SATA DVD-RW ProLiant DL (rack-optimized): Optical Drive



Overview

481	047-B21	

- HP ProLiant DL120 G6
 - HP ProLiant DL120 G7
 - HP ProLiant DL160 G6
 - HP ProLiant DL160se G6
- HP ProLiant DL165 G7
- HP ProLiant DL320 G5p
 NOTE: 4 HDD Models only.
- HP ProLiant DL320 G6

NOTE: This is a list of supported servers. Some may be discontinued.

Warranty

The warranty for this device is 1 year parts only. Maximum: The remaining warranty of the HP server product in which it is installed (to a maximum three-year limited warranty).

- 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 HP System level this product attaches too.



Service and Support

Service and Support HP

HP Technology Services

HP Technology Services offers you consultants and support experts to solve your most complex infrastructure problems. We help keep your business running, boost availability, and avoid downtime.

Protect your business beyond warranty with HP Care Pack Services

When you buy HP Options, it's also a good time to think about what level of service you may need. HP Care Pack services provide total care and support expertise with committed response choices designed to meet your IT and business need.

HP Foundation Care services deliver scalable support-packages for HP industry-standard servers and software. You can choose the type and level of service that is most suitable for your business needs. New to this portfolio is HP Collaborative Support. If you are running business critical environments, HP offers Proactive Care or Critical Advantage. These services help you deliver high levels of application availability through proactive service management and advanced technical response.

Here is the support service recommendation from the Foundation Care and Proactive Care portfolio. For customized support service solution, HP can work with you to tailor a service solution for your unique support requirements using broader services portfolio of Foundation Care and Proactive Care.

Recommended HP Care Pack Services for optimal satisfaction with your HP product

Recommended Services

3-Year HP 24x7 4 hour Response, Hardware Support Onsite Service

Provides you with rapid remote support and if required an HP authorized representative who will arrive on site any time and day of the year to begin hardware maintenance service within 4 hours of the service request being logged.

http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EEE.pdf

OR

3-Year HP 24x7 4 hour Response, HP Collaborative Support

Offers customers a single point of contact for server problem diagnosis, hardware problem resolution, and basic software problem diagnosis, fault isolation, and resolution if available to HP. If the problem is with HP HW, the representative will arrive on site any time and day of the year to begin hardware maintenance service within 4 hours of the service request being logged. In case, the issue is with HP or supported third-party software product and cannot be resolved by applying known fixes, HP will contact the third-party vendor and create a problem incident on your behalf.

HP ProLiant Server Hardware Installation

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

http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN.pdf



Service and Support	t
Related HP Care P Related Services	Pack Services to enhance your HP product experience 3-Year HP 24x7 4 hour Response, Proactive Care or Critical Advantage Helps optimize your systems and delivers high levels of application availability through proactive service management and advanced technical response. A skilled Technical Manager will own your query or issue end to end until resolved, delivering a single point of contact for you
	http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA3-2140ENW.pdf
	OR
	 3-Year HP 6-hour Onsite Call-to-Repair, HP Collaborative Support Offers customers a single point of contact for server problem diagnosis, hardware problem resolution to return the hardware in operating condition within 6 hours of the initial service request to the HP Global Solution Center, and basic software problem diagnosis, fault isolation, and resolution if available to HP. In case, the issue is with HP or supported third-party software product and cannot be resolved by applying known fixes, HP will contact the third-party vendor and create a problem incident on your behalf. HP Proactive Select Service Provides a flexible way to purchase HP best-in-class consultancy and technical services. You can buy Proactive Select Service Credits when you purchase your hardware and then use the credits over the next 12 months.
	http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA2-3842ENN.pdf
Insight Remote Support	Provides 24 X 7 remote monitoring, proactive notifications, and problem resolution. Learn more http://www.hp.com/go/insightremotesupport
HP Support Center	Personalized online support portal with access to information, tools and experts to support HP business products. Submit support cases online, chat with HP experts, access support resources or collaborate with peers. Learn more http://www.hp.com/go/hpsc
	HP's Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime. HP Insight Remote Support and HP Support Center are available at no additional cost with a HP warranty, HP Care Pack or HP contractual support agreement.
	*HP' Support Center Mobile App is subject to local availability
Parts and materials	HP will provide HP-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. Supplies and consumable parts will not be provided as part of this service; standard warranty terms and conditions apply. Parts and components that have exceeded their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual or the technical product data sheet will not be provided, repaired or replaced as part of this service



Service and Support

Warranty / Service Coverage	For ProLiant servers and storage systems, this service covers HP-branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as external monitors up to 22" and tower UPS products; these items will be covered at the same service level and for the same coverage period as the server unless the maximum supported lifetime and/or the maximum usage limitation has been exceeded. Coverage of the UPS battery is not included; standard warranty terms and conditions apply.		
	The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HP due to malfunction. It does not apply to any exchange of Disk or SSD/Flash Drives that have not failed. SSD/Flash Drives that are specified by HP as consumable parts and/or that have exceeded maximum supported lifetime and/or the maximum usage limit as set forth in the manufacturer's operating manual or the technical data sheet are not eligible for the defective media retention service feature option.		
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 www.hp.com/services/bladesystem		

Technical Specifications

HP Half-Height SATA DVD RW Optical Drive (including Jackblack)

Shipping Dimensions (H x W x D)	6.0 x 9.88 x 10.88 in (*	15.24 x 25.1 x 27.64 cm)		
Drive Dimensions (H x W x D)	1.62 x 5.75 x 7.8 inche	es (4.13 x 14.6 x 20 cm)		
Device Type	DVD+/-RW Drive	(Super-Muilti Drive)		
Disk	Applicable Disk	DVD-ROM DVD-R DVD-R DL DVD-RW		
		DVD+R		
		DVD+R DL		
		DVD+RW DVD-RAM Ver. 1.1 (R	and Only)	
		DVD-RAM Ver. 2.2 (R	-	
		CD-ROM XA		
		CD-ROM Mode-1 dat	a disc	
		CD-ROM Mode-2 dat	a disc	
		CD Audio disc		
		CD-Extra CD-RW		
		CD-R		
		Photo CD		
		CD-I		
		CD-DA		
	Capacity	DVD-ROM	DVD-SL	4.7 GB/side
			DVD-DL	8.5 GB/side
			Double Sided	9.40 GB
		DVD+/-R		4.7 GB/side
		DVD +/-RW DVD-RAM	Vor 1 1 120 mm	4.7 GB/side 2.6 GB/side
		DVD-RAM	Ver.1.1, 120 mm Double Sided	5.2 GB
			Ver. 2.2, 120 mm	4.7 GB/side
		CD-ROM	Mode-1	650 MB (550 MB)
			Mode-2	742 MB (640 MB)
	Block Size	DVD		2,048 bytes
		CD	Mode-1	2048, 2352 bytes
			Mode-2 Form1	2048, 2328, 2336, 2340 2352 bytes
			Mode-2 Form2	2328, 2336, 2340, 2352 bytes
Loading Mechanism Interface	Diameter Tray type SATA 1.5	120 mm, 80 mm (wit	h adapter at vertical mountii	ng mode)
Access Times (typical)	Random	DVD-ROM < 130 ms,	CD-ROM < 120 ms	
	Full-Stroke	DVD-ROM < 240 ms,		



Technical Specifications

Data Transfer Rate	DVD-ROM	Read	Up to 16X
(sustained)	DVD+R/-R	Read/Write	Up to 16X
	DVD+R DL/-R DL	Read	Up to 12X
	DVD+R DL/-R DL	Write	Up to 8X
	DVD+RW	Read/Write	Up to 8X
	DVD-RW	Read	Up to 8X
	DVD-RW	Write	Up to 6X
	DVD-RAM	Read/Write	Up to 5X
	CD-ROM	Read	Up to 40X
	CD-R	Read/Write	Up to 40X
	CD-RW	Write	Up to 24X
Cache Buffer	0.5MB (Minimum)		
Spin-up Time (typical)	less than 10 seconds (not	including tray in)	
MTBF	125,000 Power On Hours (POH), 25% Duty Cycle		
Ambient Temperature	Operating	41° to 122° F (5° to 50° C)	
	Storage	-22° to 140° F (-30° to 60°	C)
Relative Humidity	Operating	10% to 90%	
	Storage	5% to 95%	

HP Slim SATA DVD RW Optical Drive (including Jackblack)

Shipping Dimensions (H × W × D)	3.97 x 7.81 x 10.75 in	(10.08 x 19.84 x 27.31 cm)		
Drive Dimensions (H x W x D)	0.5 x 5.2 x 5.45 in (1.2	7 x 13.2 x 13.8 cm)		
Device Type	DVD+/-RW Drive	(Super-Muilti Drive)		
Disk	Applicable Disk	DVD-ROM DVD-R DVD-R DL DVD-R DL DVD-RW DVD+R DL DVD+RW DVD-RAM CD-ROM XA CD-ROM Mode-1 data disc CD-ROM Mode-2 data disc CD-ROM Mode-2 data disc CD-RW Mode-2 data disc CD-Extra CD-RW CD-R Photo CD CD-I CD-I CD-DA		
	Capacity	DVD-ROM	DVD-SL DVD-DL	4.7 GB/side 8.5 GB/side
			Double Sided	9.40 GB



HP SATA DVD RW Optical Drives

Technical Specifications

	Block Size	DVD+/-R DVD+/-RW DVD-RAM CD-ROM DVD CD	Ver.2.2, 120mm Mode-1 Mode-2 Mode-1	4.7 GB/side 4.7 GB/side 4.7 GB/side 650 MB (550 MB) 742 MB (640 MB) 2,048 bytes 2048 bytes
			Mode-2 Form1	2048, 2352 bytes
	Diameter	120 mm, 80 mm (with adap	Mode-2 Form2	2352 bytes
Loading Mechanism	Tray type Manual Load	120 mm, 60 mm (with dudp	iter at vertical mounting n	noue)
Interface	SATA 1.5			
Access Times (typical)	Random	DVD-ROM < 120 ms, CD-RO	M < 110 ms	
	Full-Stroke	DVD-ROM < 250 ms, CD-RO		
Data Transfer Rate	DVD-ROM	Read	Up to 8X	
	DVD+R/-R	Read/Write	Up to 8X	
	DVD+RW	Read/Write	Up to 8X	
	DVD-RW	Read	Up to 8X	
	DVD-RW	Write	Up to 6X	
	DVD+R DL/-R DL	Read	Up to 8X	
	DVD+R DL/-R DL	Write	Up to 6X	
	DVD-RAM	Read/Write	Up to 5X	
	CD-ROM	Read	Up to 24X	
	CD-R/-RW	Read/Write	Up to 24X	
Cache Buffer	0.5MB (Minimum)			
Spin-up Time (typical)	less than 15 seconds			
MTBF	35,000 Power On Hours (PC	DH), 25% Duty Cycle		
Ambient Temperature	Operating	41° to 122° F (5° to 50° C)		
	Storage	-22° to 140° F (-30° to 60° (C)	
Relative Humidity	Operating	10% to 80%		
(non-condensing)	Storage	5% to 90%		

HP 9.5mm SATA DVD RW Optical Drive (including Jackback)

Shipping Dimensions (H × W × D)	3.97 x 7.81 x 10.75 in (10.08 x 19.84 x 27.31 cm)			
Drive Dimensions (H × W × D)	0.374 x 5.1 x 5.2 in (9.5 x 130 x 132 mm)			
Device Type	DVD+/-RW Drive (Super-Muilti Drive)			
Disk	Applicable Disk DVD-ROM DVD-R DVD-R DVD-R DL DVD-RW DVD+R			



DVD+R DL

Technical Specifications

		DVD+RW DVD-RAM CD-ROM XA CD-ROM Mode-1 data disc CD-ROM Mode-2 data disc CD Audio disc CD-Extra CD-Extra CD-RW CD-R Photo CD CD-1 CD-DA		
	Capacity	DVD-ROM	DVD-SL	4.7 GB/side
			DVD-DL	8.5 GB/side
			Double Sided	9.40 GB
		DVD+/-R		4.7 GB/side
		DVD+/-RW	Nov. 2.2.120 mm	4.7 GB/side
		DVD-RAM CD-ROM	Ver. 2.2, 120 mm	4.7 GB/side
		CD-ROM	Mode-1 Mode-2	650 MB (550 MB) 742 MB (640 MB)
	Block Size	DVD	Moue-2	2048 bytes
	DIOCK JIZE	CD	Mode-1	2048 bytes
			Mode-2 Form1	2048, 2352 bytes
			Mode-2 Form2	2352 bytes
	Diameter	120 mm, 80 mm (with ada		=
Loading Mechanism	Tray type Manual Load	,	, ,	
Interface	SATA 1.5			
Access Times (typical)	Random	DVD-ROM < 160 ms, CD-RO)M < 140 ms	
	Full-Stroke	DVD-ROM < 300 ms, CD-RO		
Data Transfer Rate	DVD-ROM	Read	Up to 8X	
	DVD+R/-R	Read/Write	Up to 8X	
	DVD+RW	Read/Write	Up to 8X	
	DVD-RW	Read	Up to 8X	
	DVD-RW	Write	Up to 6X	
	DVD+R DL/-R DL	Read	Up to 8X	
	DVD+R DL/-R DL	Write	Up to 6X	
	DVD-RAM	Read/Write	Up to 5X	
	CD-ROM	Read	Up to 24X	
	CD-R	Read/Write	Up to 24X	
	CD-RW	Write	Up to 16X	
Cache Buffer	0.5 MB (Minimum)			
Spin-up Time (typical)	less than 15 seconds			
MTBF	35,000 Power On Hours (F	•••		
Ambient Temperature	Operating	41° to 122° F (5° to 50° C)		
	Storage	-22° to 140° F (-30° to 60°	L)	



Technical Specifications

Relative Humidity (non-condensing)	Operating Storage	10% to 80% 5% to 90%
Environment-friendly Products and Approach	End-of-life Management and Recycling	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.

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