

HP D2220sb Storage Blade

Compact yet flexible high-speed storage for your BladeSystem



Do you need a direct attached or shared storage solution within your BladeSystem enclosure?

What's new

- Supports HP Smart Array P420i controller
- Supports PCIe Gen2
- Supports HP Smart Drive Carriers
- Supports 2 GB FBWC
- Supports Active Health System (AHS)
- Supports SAAP 2.0

Provides high speed entry-level direct attached or shared storage for HP c-Class Gen8 BladeSystem while delivering up to 115.2 TB of storage with features normally found in enterprise data centers.

Direct attached storage

The HP D2220sb Storage Blade delivers direct attached storage for c-Class Gen8 blade servers, with support for up to twelve small form factor (SFF) serial attached SCSI (SAS) hard disk drives, or SAS/serial advanced technology attachment (SATA) solid-state drives (SSDs) or SATA midline hard drives.

The server blade enclosure backplane provides a PCI express (PCIe) connection to the adjacent c-Class server blade and enables high performance storage access without any additional cables.

The D2220sb features an onboard Smart Array P420i controller with 2 GB flash-backed write cache (FBWC), for increased performance and data protection.

Shared storage

Use the HP StoreVirtual VSA to turn the D2220sb into a scalable and robust iSCSI SAN for use by all servers in the enclosure and any server on the network. VSA includes remote replication capabilities, thin provisioning, and snapshot.

HP StoreEasy 3830 Gateway Storage Blade is a flexible storage server solution for BladeSystem environments. Combine the StoreEasy 3830 with the D2220sb Storage Blade to enable file serving and iSCSI shared storage inside the BladeSystem enclosure.

Key selling points

High-performance direct attached storage

- Supports twelve universal SFF hot-plug SAS hard disk drives (or SAS/SATA SSDs or SATA Midline hard disk drives) which expand the spindle count for the adjacent blade server
- Provides peak DAS performance with the high-speed PCIe connection to the adjacent c-Class server blade
- Delivers increased performance and data protection with HP Smart Array P420i controller using 2 GB FBWC
- Offers support for up to eight D2220sb storage devices off a single BladeSystem c7000 enclosure for up to 115.2 TB of capacity

Scalable internal shared storage

- Build scalable internal shared storage with the D2220sb Storage Blade and HP StoreVirtual VSA. Storage can scale within the same c-Class BladeSystem enclosure or across enclosures via iSCSI.
- Get scalable iSCSI SAN based on a clustered storage architecture and gain remote replication capabilities, thin provisioning, and snapshots with HP StoreVirtual VSA.
- Expand capacity by adding D2220sb and HP StoreVirtual VSA within the same enclosure or to additional enclosures.

Compact yet flexible

- Plug directly into any c-Class enclosure with no additional cabling and provide dedicated storage for the adjacent server blade.
- Use the Smart Array P420i controller to support RAID 0, 1, 1+0, 5, and 6 with HP Advanced Data Guarding (ADG) for a choice of RAID options.
- Choose from a range of SFF drives of SAS/SATA/SSD technology that can be fitted into any of the twelve drive bays.

Familiar HP ProLiant Management

- Configure or reconfigure your disk drive array with HP's browser-based Array Configuration Utility (ACU).
- Receive hard drive pre-failure alerts and manage the D2220sb through HP Systems Insight Manager.
- Manage storage remotely using the adjacent blade server's HP Integrated Lights-Out (iLO) technology.

Technical specifications

HP D2220sb Storage Blade

Drive description	12 SFF SAS/SSD
Drives supported	146 GB 6G 15K SFF dual-port ENT SAS 300 GB 6G 10K SFF dual-port ENT SAS 300 GB 6G 15K SFF dual-port ENT SAS 450 GB 6G 10K SFF dual-port ENT SAS 600 GB 6G 10K SFF dual-port ENT SAS 900 GB 6G 10K SFF dual-port ENT SAS 1.2 TB 6G 10K SFF dual-port ENT SAS 200 GB 6G SFF SLC SAS solid state drive 400 GB 6G SFF SLC SAS solid state drive For more drive support, please refer to D2220sb QS
Capacity	14.4 TB Raw internal SAS Maximum with (12) 1.2 TB SFF SAS hard disk drives
Storage expansion options	With HP D2220sb storage blade you can have up to 8 nodes per blade enclosure or a maximum 115.2 TB of internal bladed storage for a storage pool cluster
BladeSystem supported	BL460c Gen8, BL465c Gen8, BL660c Gen8
Storage controllers	(1) Smart Array P420i/2 GB FBWC
Compatible Operating Systems	Microsoft® Windows® Server 2008 R2 Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware ESX and ESXi Please refer to D2220sb QS for more details

HP D2220sb Storage Blade (continued)

Management	HP SIM, OA v3.00 (or later), ACU and ACU CLI, ORCA, SNMP
Form factor	Half-height
Warranty	3 year NBD parts only

D2220sb Storage Blade CTO**D2220sb Storage Blade BTO**

Model differentiator	D2220sb storage blade configure-to-order	D2220sb storage blade build-to-order
Drive description	12 SFF SAS/SATA/SSD supported	
Capacity	0 TB Included; supports 14.4 TB SAS maximum depending on drive type	0 TB Included; supports 14.4 TB SAS maximum depending on drive type
Storage controllers	(1) Smart Array P420i/2 GB FBWC	
Form factor	Half-height	
Warranty	3 year NBD parts only	3 year NBD parts only

D2220sb Storage Blade Bundle with SAAP License**D2220sb PCIe and HP StoreVirtual VSA Bundle with SAAP License****D2220sb PCIe Storage Blade with (12) 900 GB 6G SAS HDD bundle**

Model differentiator	D2220sb Storage Blade, includes a Smart Array Advanced Pack 2.0 (SAAP 2.0) single server License (Part number BC377A)	D2220sb Storage Blade, includes a Smart Array Advanced Pack 2.0 (SAAP 2.0) single server License (Part number BC377A), and a single HP StoreVirtual VSA license	D2220sb Storage Blade and 12 HP 900 GB 6G SAS 10K rpm SFF (2.5-inch) Dual Port Enterprise Hard Drive (652589-B21)
Drive description	12 SFF SAS/SATA/SSD supported	12 SFF SAS/SATA/SSD supported	12 SFF SAS/SATA/SSD supported
Capacity	0 TB Raw internal SAS included; supports 14.4 TB SAS maximum depending on drive type	0 TB included; supports 14.4 TB SAS maximum depending on drive type	10.8 TB included
Storage controllers	(1) Smart Array P420i/2 GB FBWC		
Form factor	Half-height		
Warranty	3 year NBD parts only 3 year 9x5 remote technical support for SAAP 2.0	3 year NBD parts only 3 year 9x5 remote technical support for SAAP 2.0 and VSA Software	3 year NBD parts only 3 year 9x5 remote technical support for SAAP 2.0

For additional technical specifications, please visit http://h18004.www1.hp.com/products/quickspecs/14507_div/14507_div.pdf

Services and support

Tap into the HP support services advantage, backed by the strategic and technical know-how of our consulting experts—for a single source solution that makes the most of your investments.

Depending on your individual support requirements, choose from three levels of care that cover the entire lifecycle to better address your needs:

Support services

Optimized Care

For mission-critical environments demanding the best performance and stability:

- **Support:** Proactive Care 24x7; Plus, 20 credits/year.
- **Additional options:** HP Proactive Care Personalized Support (once per each new Proactive Care support environment), HP Personalized Support Additional Day, and an additional 10 HP Proactive Select credits per year.

Standard Care

For business-critical environments that need to maintain the highest level of uptime:

- **Support:** HP Proactive Care 24x7; Plus, 10 credits/year.
- **Additional options:** HP Proactive Care Personalized Support (once per each new Proactive Care support environment), HP Personalized Support Additional Day, and an additional 10 HP Proactive Select credits per year.

Basic Care

For the minimum recommended support:

- **Support:** HP Support Plus 24; Plus 10 credits/year.
- **Additional options:** 10 Proactive Select Credits per year.

Additional HP Storage Services recommendations to support your HP Store Virtual needs:

- **Discovery, Planning and Design services:** HP Storage Efficiency Analysis Service; HP Storage Impact Analysis Service; HP Storage Modernization Service.

Deployment services

- HP StoreVirtual 4000 Storage Installation and Startup Service
- HP StoreVirtual VSA Software Installation and Startup Service
- HP StoreVirtual 4600 Installation and Startup

Integration services


- HP Data Migration Service
- HP Storage and Data Residency Services
- P4000 SAN/iQ Update Service
- HP Performance and Capacity Assessment for P4000
- HP Proactive Select

If none of our support recommendations meet your needs, we can tailor a service solution for your unique support requirements. Only HP brings together deep expertise, proactive and business critical support and a strong partner network—plus, a full set of infrastructure services designed to power a Converged Infrastructure. Visit hp.com/services/storage.

For more information

Get enterprise grade storage with the D2220sb Storage Blade. Visit hp.com/go/d2220sb.

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