

## Continuous Data Protector (CDP) VS Series HA Appliances

### HIGH-PERFORMANCE, HIGH-AVAILABILITY DISK BACKUP WITH REPLICATION & AUTOMATED DR

Business-critical data, applications, and storage resources continue to explode in size and complexity. Protecting mixed assets such as physical and virtual servers, operating systems, applications, networking, and storage requires multiple 'point' solutions from various vendors, making it difficult to manage the protection, backup, and recovery of data. FalconStor® Continuous Data Protector (CDP) VS Series Appliances are designed to address these issues by offering high availability (HA), fully redundant active-active controllers, concurrent network connectivity, and automated storage tiering for dynamic performance allocation. These HA appliances provide massive bandwidth, scalability, load balancing, and efficiency for today's large enterprises. A comprehensive set of features includes mirroring, application-consistent snapshots, journaling, WAN-optimized replication, and automated disaster recovery (DR), allowing IT administrators to meet demanding service level agreements (SLAs), even in the most complex heterogeneous environments.



### Highlights

#### Scalability & HA

- Simple, capacity-based pricing
- Capacity and disk type ranges from 1TB to 192TB per appliance
- HA architecture with active/active controllers

#### All-inclusive functionality

- Mirroring, snapshots (up to 1,000), journaling, replication
- Enables definition of protection policies

#### WAN-optimized replication

- MicroScan™ technology reduces bandwidth requirements and costs
- Enables rapid disaster recovery

#### Disk-based backup

- Eliminates the backup window
- Enables near-zero recovery point objectives (RPO)
- Defines protection policies on individual server, departmental, or global basis

#### D2D2T backup

- Reduces tape costs
- Provides instant recovery

#### Automated DR via RecoverTrac™ tool

- Automates complex application recovery and DR testing
- Supports P2P, P2V, and V2V recovery

#### Heterogeneous support

- Physical or virtual servers
- Microsoft Windows, Linux, Unix, Solaris, HP-UX
- iSCSI, Fibre Channel (FC), and FCoE connectivity

#### Application-specific snapshot agents

- Eliminates backup corruption
- Supports an extensive list of applications

# Specifications: FalconStor CDP VS Series HA Appliances

	CDP VS630	CDP VS700	CDP VS750
<b>Physical Characteristics</b>			
Host type	iSCSI	FC/iSCSI	FC/iSCSI
Number of storage controllers	One, expandable to two for high availability (HA)		
Platform rack	Rack 2U	Rack 2U	Rack 5U
RAM included	16GB	16GB	16GB
Maximum # of disks supported	192	192	288
CPU cores	4	4	4
Dimensions	3.40" (8.64 cm) x 17.44" (44.31cm) x 26.80" (68.07cm)		8.6" (21.79 cm) x 17.44" (44.31cm) x 26.80" (68.07cm)
Weight	50.71 lb (23 kg) maximum configuration		78 lb (35.3 kg) maximum configuration
Power supply	Two (2) hot-plug 870W PSUs (1+1)		Two (2) hot-plug 1100W PSUs (1+1)
BTU/hour	2968	2968	3412
Temperature	50° to 95°F (10° to 35°C)		
Humidity	20% to 80%, noncondensing		
Altitude	-50 to 10,000 ft (-16 to 3048 m)		
<b>Host Connections</b>			
iSCSI target ports	4 x 1GbE (host)	4 x 1GbE (host)	2x10GbE + 4xGbE (host)
# of FC target/initiator ports	—	4 x 8 Gb/s (host/SAN)	4 x 8 Gb/s (host/SAN)
<b>Advanced Features</b>			
Thin Provisioning	Included	Included	Included
Synchronous data mirroring	Included	Included	Included
Replication (continuous or periodic) with compression and encryption	Included	Included	Included
DynaPath® for Microsoft Windows and Linux multipathing	Included	Included	Included
Snapshots (TimeMark®/TimeView®) per LUN	up to 1,000		
DiskSafe™ agent	Included	Included	Included
FileSafe™	Included	Included	Included
Email alerts	Included	Included	Included
Centralized Client Manager (CCM)	Included	Included	Included
Support for VMware vCenter Site Recovery Manager with automated failover/failback	Included	Included	Included
Multisite cluster for Microsoft Windows	Included	Included	Included
RecoverTrac for automated DR	Included	Included	Included

Snapshot agents are available for the following environments: Microsoft Exchange Server, Microsoft SQL Server, Microsoft VSS, IBM DB2, IBM Informix, Lotus Notes/Domino, Oracle, Sybase, MySQL, Ingres, SAP, MaxDB, Novell GroupWise, Pervasive.SQL, SAP MaxDB, and VSS, as well as file systems (Linux, HP-UX, Solaris, AIX, Microsoft Windows, Novell NetWare).

# Specifications: FalconStor CDP VS Series Expansion Heads

	RAID NODE 7.2TB SAS	RAID NODE 3.5TB 2.5" SAS	RAID NODE 12TB NL-SAS	RAID NODE 24TB NS-SAS	RAID NODE 12TB 2.5" NL-SAS	RAID NODE 1.7TB SLC-SSD	RAID NODE 3.5TB 2.5" SLC-SSD
<b>Capacity Expansion</b>							
Type	15K SAS	15K SAS	NL-SAS	NL-SAS	NL-SAS	SLC-SSD	SLC-SSD
HDD form factor	3.5" (8.9 cm)	2.5" (6.4 cm)	3.5" (8.9 cm)	3.5" (8.9 cm)	2.5" (6.4 cm)	3.5" (8.9 cm)	2.5" (6.4 cm)
Capacity	7.2TB	3.5 TB	12TB	24TB	12TB	1.7 TB	3.5 TB
Number of bays	12	24	12	12	24	12	24
<b>Expansion Head</b>							
Scalability: # of drives	Up to 96	Up to 96	Up to 96	Up to 96	Up to 96	Up to 96	Up to 96
RAID level	Support for RAID levels 0, 1, 5, 6, 10 Up to 96 physical disks per group in RAID 0, 1, 10 Up to 30 physical disks per group in RAID 5, 6						
Connectivity to FalconStor CDP VS heads	6Gb SAS (SFF-8088 mini connector)						
Dimensions	3.42" (8.68 cm) x 17.57" (44.63 cm) x 22.09" (56.1 cm)	3.42" (8.68 cm) x 17.57" (44.63 cm) x 20" (50.8 cm)	3.42" (8.68 cm) x 17.57" (44.63 cm) x 22.09" (56.1 cm)	3.42" (8.68 cm) x 17.57" (44.63 cm) x 22.09" (56.1 cm)	3.42" (8.68 cm) x 17.57" (44.63 cm) x 20" (50.8 cm)	3.42" (8.68 cm) x 17.57" (44.63 cm) x 22.09" (56.1 cm)	3.42" (8.68 cm) x 17.57" (44.63 cm) x 20" (50.8 cm)
Weight (maximum configuration)	53.35 lb (24.2 kg)	64.59 lbs (29.3 kg)	53.35 lb (24.2 kg)	53.35 lb (24.2 kg)	64.59 lbs (29.3 kg)	53.35 lb (24.2 kg)	64.59 lbs (29.3 kg)
Operating temperature	50° to 95°F (10° to 35°C) with a maximum temperature gradation of 50°F (10°C) per hour						
Operating relative humidity	20% to 80% (non-condensing) with a maximum humidity gradation of 10% per hour						
Operating altitude	-50 to 10,000 ft (-16 to 3048 m) Note: For altitudes above 2950 ft, the maximum operating temperature is de-rated 1°F/550 ft.						
Power supplies (per supply)	600 W peak output						
Maximum heat dissipation	150 W						
Input voltage range	90 - 264 VAC						
Frequency range	47 - 63 Hz						
Maximum input current at rated power	55 A for 10 ms or less, 25 A for 10 - 150 ms						
Available hard-drive power (per slot) supporting continuous consumption	25 W	12 W	25 W	25 W	12 W	25 W	12 W

# Specifications: FalconStor CDP VS Series Expansion Units

EXPANSION NODE 7.2TB SAS	EXPANSION NODE 3.5 TB 2.5" NL-SAS	EXPANSION NODE 12TB NL-SAS	EXPANSION NODE 24TB NL-SAS	EXPANSION NODE 12TB 2.5" NL-SAS	EXPANSION NODE 1.7 TB SLC-SSD	EXPANSION NODE 3.5 TB 2.5" SLC-SSD
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Capacity Expansion							
Type	15K SAS		NL-SAS			SLC SSD	
HDD form factor	3.5" (8.9 cm)	2.5" (6.4 cm)	3.5" (8.9 cm)	3.5" (8.9 cm)	2.5" (6.4 cm)	3.5" (8.9 cm)	2.5" (6.4 cm)
Capacity	7.2TB	3.5 TB	12TB	24TB	12TB	1.7 TB	3.5 TB
Number of bays	12	24	12	12	24	12	24
Capacity Expansion Units							
Connectivity to capacity expansion	6Gb SAS (SFF-8088 mini connector)						
Maximum number of units per head	7	3	7	7	3	7	3
Dimensions	3.39" (8.7 cm) x 18.8" (48.2 cm) x 23.17" (59.4 cm)	3.39" (8.7 cm) x 17.57" (44.63 cm) x 29.1" (54.1 cm)	3.39" (8.7 cm) x 18.8" (48.2 cm) x 23.17" (59.4 cm)	3.39" (8.7 cm) x 18.8" (48.2 cm) x 23.17" (59.4 cm)	3.39" (8.7 cm) x 17.57" (44.63 cm) x 29.1" (54.1 cm)	3.39" (8.7 cm) x 18.8" (48.2 cm) x 23.17" (59.4 cm)	3.39" (8.7 cm) x 17.57" (44.63 cm) x 29.1" (54.1 cm)
Weight (maximum configuration)	62.6 lb (28.39 kg)	51 lbs (23.31 kg)	62.6 lb (28.39 kg)	62.6 lb (28.39 kg)	51 lbs (23.31 kg)	62.6 lb (28.39 kg)	51 lbs (23.31 kg)
Power supply (per PSU)	600 W						
Host heat dissipation	188 W						
Input voltage range	100-240 VAC, auto-sensing						
Frequency range	50 - 60 Hz						
Amperage	8.6 A at 100 V, 4.3 A at 240 V						
Available hard-drive power (per slot)	Up to 1.16 A at +5 V, up to 1.6 A at +12V	Up to 1.2 A at +5 V, up to 0.5 A at +12V	Up to 1.16 A at +5 V, up to 1.6 A at +12V	Up to 1.16 A at +5 V, up to 1.6 A at +12V	Up to 1.2 A at +5 V, up to 0.5 A at +12V	Up to 1.16 A at +5 V, up to 1.6 A at +12V	Up to 1.2 A at +5 V, up to 0.5 A at +12V
Temperature	Operating: 50° to 95°F (10° to 35°C) with a maximum temperature gradation of 50°F (10°C) per hour Storage: -40° to 149°F (-40° to 65°C) with a temperature gradation of 68°F (20°C) per hour						
Relative humidity	Operating: 8% to 85% (non-condensing) with a maximum humidity gradation of 10% per hour Storage: 5% to 95% (non-condensing)						
Altitude	Operating: -50 to 10,000 ft (-16 to 3048 m) Storage: -50 to 35,000 ft (-16 to 10,600 m)						

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