

# DELL STORAGE SC SERIES EXPANSION ENCLOSURES

Versatile, high-performance storage



Dell Storage SC Series Expansion Enclosures

## SCALE ON DEMAND

Store more data, increase efficiency, and help reduce your overall TCO with Dell Storage SC Series including the SC9000, SC8000, SC7020, SC4020 and SCv2000. Easily add capacity to your SC Series arrays with flexible and efficient enclosures, starting with any amount of storage capacity, from terabytes to over 3PB raw capacity and up to 960 back-end drives per system.<sup>1</sup>

## FUTURE FLEXIBILITY

Intermix different drive types (SAS, NL-SAS and SSD) in the same enclosure, with a variety of expansion form factor options. Choose from the 2U 12-drive, 24-drive enclosure or the ultra-dense 84-drive, 5U enclosure. Adding a new enclosure is simple — the new drives can be automatically assimilated into the existing virtualized pool or set up as their own standalone pool. Easily evolve from one configuration to another without having to replace drives.

## ADVANCED EFFICIENCY

The SC Series expansion enclosures help lower data center power requirements with redundant, hot-swappable power supplies, and better protect your data with cooling efficiencies. The SC Series arrays offer built-in software technology like auto-tiering or RAID tiering and thin provisioning that can lower costs and save storage space. Additionally, award-winning installation and support services can ensure your deployment and SC Series environment runs smoothly.

## Specifications

SC SERIES	SC200	SC220	SC400	SC420	SC280
<b>ENTERPRISE-READY EXPANSION ENCLOSURES</b>					
<b>SUPPORTED CONTROLLERS</b>	SC9000, SC8000, SC7020, SC4020	SC9000, SC8000, SC7020, SC4020	SC9000, SC7020	SC9000, SC7020	SC9000, SC8000, SC7020, SC4020
<b>CONTROLLER-ENCLOSURE CONNECTION (DUAL MODULES)</b>	6Gb SAS	6Gb SAS	12Gb SAS	12Gb SAS	6Gb SAS

<sup>1</sup> Available with the SC9000, SC8000 and SC4020 controller environments. The SCv2000 offers up to 168 drives and 672TB.

<b>SC SERIES ENTERPRISE- READY EXPANSION ENCLOSURES</b>	<b>SC200</b>	<b>SC220</b>	<b>SC400</b>	<b>SC420</b>	<b>SC280</b>
<b>DRIVE SLOT SIZE</b>	3.5" <sup>2</sup>	2.5"	3.5" <sup>2</sup>	2.5"	3.5"
<b>MAX DRIVES PER ENCLOSURE</b>	12	24	12	24	84
<b>MAX CAPACITY PER ENCLOSURE</b>	96TB (120TB <sup>3</sup> )	368.64TB	96TB (120TB <sup>3</sup> )	368.64TB	504TB
<b>FORM FACTOR</b>	2U	2U	2U	2U	5U
<b>INTERMIXED DRIVE TYPE SUPPORT</b>	Yes	Yes	Yes	Yes	7.2K HDD only
<b>SAS DRIVE SUPPORT</b>	<b>3.5" HDD</b> 2TB, 7.2K 3TB, 7.2K 4TB, 7.2K 4TB, 7.2K SED 6TB, 7.2K 6TB, 7.2K SED 8TB, 7.2K 10TB, 7.2K <sup>3</sup>  <b>2.5" Write- intensive SSD<sup>2</sup></b> 400GB 1.6TB	<b>2.5" HDD</b> 300GB, 15K 600GB, 15K 600GB, 15K SED 600GB, 10K 900GB, 10K 1.2TB, 10K 1.2TB, 10K SED 1.8TB, 10K 1.8TB, 10K SED 1TB, 7.2K 1TB, 7.2K SED  <b>2.5" Write- intensive SSD</b> 400GB 800GB 1.6TB 1.6TB SED  <b>2.5" Read- intensive SSD</b> 480GB 960GB 1.92TB 3.84TB 7.68TB <sup>3</sup> 15.36TB <sup>3</sup>	<b>3.5" HDD</b> 4TB, 7.2K 6TB, 7.2K 6TB, 7.2K SED 8TB, 7.2K 10TB, 7.2K <sup>3</sup>  <b>2.5" Write- intensive SSD<sup>2</sup></b> 1.6TB 1.6TB SED  <b>2.5" Read- intensive SSD<sup>2</sup></b> 3.84TB	<b>2.5" HDD</b> 600GB, 15K 600GB, 15K SED 1.2TB, 10K 1.2TB, 10K SED 1.8TB, 10K 1.8TB, 10K SED  <b>2.5" Write- intensive SSD</b> 400GB 800GB 1.6TB 1.6TB SED  <b>2.5" Read- intensive SSD</b> 480GB 960GB 1.92TB 3.84TB 7.68TB <sup>3</sup> 15.36TB	<b>3.5" HDD</b> 4TB, 7.2K 4TB, 7.2K SED 6TB, 7.2K 6TB, 7.2K SE

<sup>2</sup> Requires 3.5" drive carriers for 2.5" drives.

<sup>3</sup> Available Q4 2016.

<b>SC SERIES ENTERPRISE- READY EXPANSION ENCLOSURES</b>	<b>SC200</b>	<b>SC220</b>	<b>SC400</b>	<b>SC420</b>	<b>SC280</b>
<b>CHASSIS</b>					
<b>HEIGHT X WIDTH X DEPTH</b>	8.7 cm (3.43 in) x 48.2cm (18.98 in) x 59.4 cm (23.39 in)	8.7 cm (3.43 in) x 48.2 cm (18.98 in) x 54.1 cm (21.30 in)	8.7 cm (3.43 in) x 48.2 cm (18.98 in) x 59.4 cm (23.39 in)	8.7 cm (3.43 in) x 48.2 cm (18.98 in) x 54.1 cm (21.30 in)	22.23 cm (8.8 in) x 48.26 cm (19 in) x 91.44 cm (36 in)
<b>WEIGHT AT MAXIMUM CONFIGURATION</b>	28.39 kg (62.6 lb))	23.31 kg (51 lb)	28.39 kg (62.6 lb)	23.31 kg (51 lb)	130.7 kg (287.5 lb)
<b>WEIGHT AT EMPTY</b>	8.84 kg (19.5 lb)	8.61 kg (19 lb)	8.84 kg (19.5 lb)	8.61 kg (19 lb)	62 kg (136.68 lb)
<b>RACK SUPPORT</b>	ReadyRails™ II static rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting				Built-in rack support
<b>POWER</b>					
<b>POWER/WATTAGE</b>	Two 700W hot-swappable, redundant power supplies; 450W maximum draw		Two 600W hot-swappable, redundant power supplies; 450W maximum draw		Two 2184W hot-swappable, redundant power supplies; 1800W maximum power
<b>HEAT DISSIPATION</b>	2,389 BTU/hr (at 700W) 1,621 BTU/hr		2,047 BTU/hr (at 600W) 1,621 BTU/hr		7,455 BTU/hr (at 2184W) 6,144 BTU/hr
<b>VOLTAGE</b>	100-240 VAC, auto sensing				208 - 240 VAC, auto sensing
<b>FREQUENCY</b>	50/60 Hz				
<b>AMPERAGE</b>	8.6 A at 100 V, 4.3 A at 240 V Maximum power draw: 74 amps				7.4 A at 241V Max
<b>ENVIRONMENTAL OPERATING CONDITIONS</b>					
<b>OPERATING TEMPERATURE</b>	10° to 35°C (50° to 95°F) with no direct sunlight on the equipment. Maximum temperature gradation of 20°C per hour				5°C to 35°C (41°F to 95°F)
<b>NON-OPERATING TEMPERATURE</b>	-40 to 65°C (-40 to 149°F) at a maximum altitude of 12,000 m (39,370 ft)				-40°C to 70°C (-40°F to 158°F)
<b>NON-OPERATING TEMPERATURE</b>	10% to 80% (non-condensing) with 29°C (84.2°F) maximum dew point				
<b>NON-OPERATING HUMIDITY (NON-CONDENSING)</b>	5% to 95% (non-condensing) with 33°C (91°F) maximum dew point				
<b>INLET TYPE</b>	0 to 3,048 m (0 to 10,000 ft) NOTE: Up to 35°C/95F maximum temperature is reduced by 1°C/300 meter (1°F/547 feet) above 950 meters (3,117 feet)				

<b>SCV2000 SERIES EXPANSION ENCLOSURES</b>	<b>SC100</b>	<b>SC120</b>	<b>SC180</b>
<b>SUPPORTED CONTROLLERS</b>	SCv2000, SCv2020	SCv2000, SCv2020	SCv2080
<b>CONTROLLER-ENCLOSURE CONNECTION (DUAL MODULES)</b>		6Gb SAS	
<b>DRIVE SLOT SIZE</b>	3.5"	2.5"	2.5" or 3.5"
<b>MAX DRIVES PER ENCLOSURE</b>	12	24	84 (the minimum number HDDs or SSDs is 28; drives can be added in increments of 14 due to thermal consideration)
<b>MAX CAPACITY PER ENCLOSURE</b>	72TB	92.16TB	504TB
<b>FORM FACTOR</b>	2U	2U	5U
<b>INTERMIXED DRIVE TYPE SUPPORT</b>	Yes	Yes	Yes
<b>SAS DRIVE SUPPORT</b>	<b>3.5" HDD</b> 2TB, 7.2K 4TB, 7.2K 6TB, 7.2K  <b>2.5" Read-intensive SSD<sup>2</sup></b> 480GB 960GB 1.92TB 3.84TB	<b>2.5" HDD</b> 300GB, 15K 600GB, 15K 600GB, 10K 900GB, 10K 1.2TB, 10K 1.8TB, 10K 1TB, 7.2K  <b>2.5" Write-intensive SSD</b> 200GB 400GB 800GB 1.6TB  <b>2.5" Read-intensive SSD</b> 480GB 960GB 1.92TB 3.84TB	<b>3.5" HDD</b> 2TB, 7.2K 4TB, 7.2K 6TB, 7.2K  <b>2.5" HDD<sup>2</sup></b> 1.2TB, 10K 1.8TB, 10K  <b>2.5" Read-intensive SSD<sup>2</sup></b> 480GB 960GB 1.92TB 3.84TB
<b>CHASSIS</b>			
<b>HEIGHT X WIDTH X DEPTH</b>	8.79 cm (3.46 in) x 48.2 cm (18.98 in) x 57.6 cm (22.67 in)	8.79 cm (3.46 in) x 48.2 cm (18.98 in) x 52.3 cm (20.59 in)	22.230 cm (8.8 in) x 48.26cm (19 in) x 91.44 cm (36 in)
<b>WEIGHT AT MAXIMUM CONFIGURATION</b>	28.9 kg (63.9 lb)	24 kg (53 lb)	130.1 kg (287 lb)

<b>SCV2000 SERIES EXPANSION ENCLOSURES</b>	<b>SC100</b>	<b>SC120</b>	<b>SC180</b>
<b>WEIGHT AT EMPTY</b>	20.6 kg (45.4 lb) minus drives	18.7 kg (41 lb) minus drives	62.1kg (137 lb) minus drives
<b>RACK SUPPORT</b>	ReadyRails™ II static rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting		Built-in rack support
<b>POWER</b>			
<b>POWER/WATTAGE</b>	580W	580W	2800W
<b>HEAT DISSIPATION</b>	1980 BTU	1980 BTU	9554 BTU
<b>VOLTAGE</b>	100-240 VAC	100-240 VAC	200-240 VAC
<b>FREQUENCY</b>	50/60 Hz	50/60 Hz	50/60 Hz
<b>AMPERAGE</b>	7.6-3.0A (x2)	7.6-3.0A (x2)	8.6-4.3A (x2)
<b>ENVIRONMENTAL OPERATING CONDITIONS</b>			
<b>OPERATING TEMPERATURE</b>	10° to 35°C (50° to 95°F) with no direct sunlight on the equipment; maximum temperature gradation of 20°C per hour		
<b>NON-OPERATING TEMPERATURE</b>	-40 to 65°C (-40 to 149°F) at a maximum altitude of 12,000 m (39,370 ft)		
<b>NON-OPERATING TEMPERATURE</b>	10% to 80% (non-condensing) with 29°C (84.2°F) maximum dew point		
<b>NON-OPERATING HUMIDITY (NON-CONDENSING)</b>	5% to 95% (non-condensing) with 33°C (91°F) maximum dew point		
<b>INLET TYPE</b>	0 to 3,048 m (0 to 10,000 ft) NOTE: Up to 35°C maximum temperature is reduced by 1°C/300 m (1°F/547 ft) above 950 m (3,117 ft)		

### End-to-end technology solutions

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services™ has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales Representative for more information.

### OEM-ready version available

From bezel to BIOS to packaging, your storage arrays can look and feel as if they were designed and built by you. For more information, visit [Dell.com/OEM](http://Dell.com/OEM).<sup>4</sup>

<sup>4</sup> OEM-ready available on certain models.

## CONTACT US

To learn more, contact your local representative or authorized reseller.

[Learn more at Dell.com/SCseries.](http://Dell.com/SCseries)



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