

Dell Storage SC Series Expansion Enclosures Versatile, high-performance storage that delivers ongoing economic value for organizations of all sizes

## Scale on demand

Store more data, increase efficiency, and help reduce your overall TCO with Dell Storage SC Series including the new enterprise-ready Dell Storage SC9000, Compellent™ SC8000, Dell Storage SC4020 and Dell Storage SCv2000 Series arrays. 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. ${ }^{1}$

## 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, 5 U 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.

| Expansion enclosure | SC200 | SC220 | SC400 | SC420 | SC280 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Supported controllers | $\begin{aligned} & \text { SC9000 } \\ & \text { SC8000 } \\ & \text { SC } 4020 \end{aligned}$ | $\begin{aligned} & \text { SC9000 } \\ & \text { SC8000 } \end{aligned}$ SC4020 | SC9000 | SC9000 | $\begin{aligned} & \text { SC9000 } \\ & \text { SC8000 } \\ & \text { SC4020 } \end{aligned}$ |
| Controller-enclosure connection (dual modules) | 6Gb SAS | 6Gb SAS | 12Gb SAS | 12Gb SAS | 6Gb SAS |
| Drive slot size | $3.5{ }^{\text {² }}$ | 2.5 " | $3.5{ }^{\text {2 }}$ | 2.5 " | 3.5" |
| Max drives per enclosure | 12 | 24 | 12 | 24 | 84 |
| Max capacity per enclosure | 72TB | 92.16 TB | 72TB | 92.16TB | 504TB |
| Form factor | 2 U | 2 U | 2 U | 2 U | 5 U |
| Intermixed drive type support | Yes | Yes | Yes | Yes | 7.2K HDD only |
| SAS drive support | SC200 | SC220 | SC400 | SC420 | SC280 |
|  | 3.5" HDD <br> 2TB, 7.2K <br> 3TB, 7.2 K <br> 4TB, 7.2K <br> 4TB, 7.2K SED <br> 6TB, 7.2K <br> 6TB, 7.2K SED <br> 2.5" Write-intensive SSD ${ }^{2}$ <br> 200GB <br> 400GB <br> 1.6TB <br> 2.5" Premium Readintensive SSD ${ }^{2}$ <br> 1.92TB | 2.5" HDD <br> 300GB, 15K <br> 600GB, 15K <br> 600GB, 15K SED <br> 600GB, 10K <br> 900GB, 10K <br> 1.2TB, 10K <br> 1.2TB, 10K SED <br> 1.8TB, 10K <br> 1.8TB, 10K SED <br> 1TB, 7.2K <br> 1TB, 7.2K SED <br> 2.5" Write- <br> intensive SSD <br> 200GB <br> 400GB <br> 800GB <br> 1.6TB <br> 1.6TB SED <br> 2.5" Premium Read-intensive <br> SSD <br> 480GB <br> 960GB <br> 1.6TB <br> 1.92TB <br> 2.5" Mainstream Readintensive SSD <br> 480GB <br> 960GB <br> 1.92TB <br> 3.84TB | 3.5" HDD <br> 4TB, 7.2K <br> 6TB, 7.2K <br> 6TB, 7.2K SED <br> 2.5" Write-intensive SSD ${ }^{2}$ <br> 1.6TB <br> 1.6TB SED <br> 2.5" Premium Readintensive SSD2 <br> 1.92TB <br> 2.5" Mainstream Readintensive SSD ${ }^{2}$ 3.84 TB | 2.5" HDD <br> 600GB, 15K <br> 600GB, 15K SED <br> 1.2TB, 10K <br> 1.2TB, 10K SED <br> 1.8TB, 10K <br> 1.8TB, 10K SED <br> 2.5" Write-intensive SSD <br> 400GB <br> 800GB <br> 1.6TB <br> 1.6TB SED <br> 2.5" Premium Read-intensive <br> SSD <br> 480GB <br> 960GB <br> 1.92TB <br> 2.5" Mainstream Readintensive SSD <br> 480GB <br> 960GB <br> 1.92TB <br> 3.84 TB | 3.5" HDD <br> 4TB, 7.2K <br> 4TB, 7.2K SED <br> 6TB, 7.2K <br> 6TB, 7.2K SED |
| Chassis | SC200 | SC220 | SC400 | SC420 | SC280 |
| Height x width x depth | $\begin{aligned} & 8.7 \mathrm{~cm}(3.43 \mathrm{in}) \times 48.2 \mathrm{~cm} \\ & (18.98 \mathrm{in}) \times 59.4 \mathrm{~cm}(23.39 \mathrm{in}) \end{aligned}$ | $\begin{aligned} & 8.7 \mathrm{~cm}(3.43 \mathrm{in}) \times 48.2 \mathrm{~cm} \\ & (18.98 \mathrm{in}) \times 54.1 \mathrm{~cm}(21.30 \mathrm{in}) \end{aligned}$ | $\begin{aligned} & 8.7 \mathrm{~cm}(3.43 \mathrm{in}) \times 48.2 \mathrm{~cm} \\ & (18.98 \mathrm{in}) \times 59.4 \mathrm{~cm}(23.39 \mathrm{in}) \end{aligned}$ | $\begin{aligned} & 8.7 \mathrm{~cm}(3.43 \mathrm{in}) \times 48.2 \mathrm{~cm} \\ & (18.98 \mathrm{in}) \times 54.1 \mathrm{~cm}(21.30 \mathrm{in}) \end{aligned}$ | $\begin{aligned} & 22.23 \mathrm{~cm}(8.8 \mathrm{in}) \times 48.26 \mathrm{~cm} \\ & (19 \mathrm{in}) \times 91.44 \mathrm{~cm}(36 \mathrm{in}) \end{aligned}$ |
| Weight at maximum configuration | $28.39 \mathrm{~kg}(62.6 \mathrm{lb})$ ) | $23.31 \mathrm{~kg}(51 \mathrm{lb})$ | $28.39 \mathrm{~kg}(62.6 \mathrm{lb})$ | $23.31 \mathrm{~kg}(51 \mathrm{lb})$ | $130.7 \mathrm{~kg}(287.5 \mathrm{lb})$ |
| Weight at empty | $8.84 \mathrm{~kg}(19.5 \mathrm{lb})$ | $8.61 \mathrm{~kg} \mathrm{(19} \mathrm{lb)}$ | $8.84 \mathrm{~kg}(19.5 \mathrm{lb})$ | $8.61 \mathrm{~kg} \mathrm{(19} \mathrm{lb)}$ | $62 \mathrm{~kg}(136.68 \mathrm{lb})$ |
| Rack support | ReadyRails ${ }^{\text {TM }}$ II static rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting |  |  |  | Built-in rack support |
| Power | SC200 | SC220 | SC400 | SC420 | SC280 |
| Power/wattage | 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 |
| Heat dissipation | 2.389 BTU/hr (at 700W) $1,621 \mathrm{BTU} / \mathrm{hr}$ |  | 2,047 BTU/hr (at 600W) 1,621 BTU/hr |  | 7,455 BTU/hr (at 2184W) <br> 6,144 BTU/hr |
| Voltage | 100-240 VAC, auto sensing |  |  |  | 208-240 VAC, auto sensing |
| Frequency | $50 / 60 \mathrm{~Hz}$ |  |  |  | $50 / 60 \mathrm{~Hz}$ |
| Amperage | 8.6 A at $100 \mathrm{~V}, 4.3 \mathrm{~A}$ at 240 V Maximum power draw: 74 amps |  |  |  | 7.4 A at 241V Max |


| Environmental <br> operating conditions | SC200 | SC220 | SC400 | SC420 |
| :--- | :---: | :---: | :---: | :---: |
| Operating temperature | $10^{\circ}$ to $35^{\circ} \mathrm{C}\left(50^{\circ}\right.$ to $\left.95^{\circ} \mathrm{F}\right)$ with no direct sunlight on the equipment. Maximum temperature gradation of $20^{\circ} \mathrm{C}$ per hour |  |  |  |
| Non-operating <br> temperature | -40 to $65^{\circ} \mathrm{C}\left(-40\right.$ to $\left.149^{\circ} \mathrm{F}\right)$ at a maximum altitude of $12,000 \mathrm{~m}(39,370 \mathrm{ft})$ | $5^{\circ} \mathrm{C}$ to $35^{\circ} \mathrm{C}\left(41^{\circ} \mathrm{F}\right.$ to $\left.95^{\circ} \mathrm{F}\right)$ |  |  |
| Operating humidity <br> ranges (non-condensing) | $10 \%$ to $80 \%$ (non-condensing) with $29^{\circ} \mathrm{C}\left(84.2^{\circ} \mathrm{F}\right)$ maximum dew point |  |  |  |
| Non-operating humidity <br> (non-condensing) | $-40^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right)$ |  |  |  |
| Inlet type | $5 \%$ to $95 \%$ (non-condensing) with $33^{\circ} \mathrm{C}\left(91^{\circ} \mathrm{F}\right)$ maximum dew point |  |  |  |

## SCv2000 Series expansion enclosures



| Expansion enclosure | SC100 | SC120 | SC180 |
| :---: | :---: | :---: | :---: |
| Supported controllers | SCv2000, SCv2020 | SCv2000, SCv2020 | SCv2080 |
| Controller-enclosure connection (dual modules) | 6Gb SAS |  |  |
| Drive slot size | $3.5{ }^{\prime \prime}$ | $2.5{ }^{\prime \prime}$ | 2.5" or 3.5" |
| Max drives per enclosure | 12 | 24 | 84 (the minimum number HDDs or SSDs is 28; drives can be added in increments of 14 due to thermal consideration) |
| Max capacity per enclosure | 72 TB | 96TB | 504TB |
| Form factor | 2 U | 2 U | $5 \cup$ |
| Intermixed drive type support | Yes | Yes | Yes |
| SAS drive support | SC100 | SC120 | SC180 |
| Drive capacities | 3.5" HDD <br> 2TB, 7.2 K <br> 4TB, 7.2K <br> 6TB, 7.2K <br> $2.5^{\prime \prime} \mathrm{HDD}^{2}$ <br> 1.8TB 10K <br> 2.5" Premium Read-intensive SSD ${ }^{2}$ <br> 1.92 TB | 2.5" HDD <br> 300GB 15K <br> 600GB 15K <br> 600GB 10K <br> 900GB 10K <br> 1.2TB 10K <br> 1.8TB 10K <br> 2.5" Write-intensive SSD <br> 200GB <br> 400GB <br> 800GB <br> 1.6 TB <br> 2.5" Premium Read-intensive SSD <br> 480GB <br> 960GB <br> 1.92TB <br> 2.5" Mainstream Read-intensive SSD <br> 480GB <br> 960GB <br> 1.92TB <br> 3.84 TB | 3.5" HDD <br> 2TB 7.2K <br> 4TB 7.2 K <br> 6TB 7.2K <br> 2.5" HDD ${ }^{2}$ <br> 1.2TB 10K <br> 1.8TB 10K <br> 2.5" Premium Read-intensive SSD ${ }^{2}$ <br> 480GB <br> 960GB <br> 1.92 TB |
| Chassis | SC100 | SC120 | SC180 |
| Height x width x depth | $\begin{aligned} & 8.79 \mathrm{~cm}(3.46 \mathrm{in}) \times 48.2 \mathrm{~cm}(18.98 \mathrm{in}) \times \\ & 57.6 \mathrm{~cm}(22.67 \mathrm{in}) \end{aligned}$ | $\begin{aligned} & 8.79 \mathrm{~cm}(3.46 \mathrm{in}) \times 48.2 \mathrm{~cm}(18.98 \mathrm{in}) \times \\ & 52.3 \mathrm{~cm}(20.59 \mathrm{in}) \end{aligned}$ | $\begin{aligned} & 22.230 \mathrm{~cm}(8.8 \mathrm{in}) \times 48.26 \mathrm{~cm}(19 \mathrm{in}) \times \\ & 91.44 \mathrm{~cm}(36 \mathrm{in}) \end{aligned}$ |
| Weight at maximum configuration | $28.9 \mathrm{~kg}(63.9 \mathrm{lb})$ | $24 \mathrm{~kg}(53 \mathrm{lb})$ | $130.1 \mathrm{~kg}(287 \mathrm{lb})$ |
| Weight empty | $20.6 \mathrm{~kg} \mathrm{(45.4} \mathrm{lb)} \mathrm{minus} \mathrm{drives}$ | $18.7 \mathrm{~kg}(41 \mathrm{lb})$ minus drives | 62.1 kg (137 lb) minus drives |
| Rack support | ReadyRailsTM \|| static rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting |  | Built-in rack support |


| Power | SC100 | SC120 | SC180 |
| :---: | :---: | :---: | :---: |
| Power/wattage | 580W | 580W | 2800w |
| Heat dissipation | 1980 BTU | 1980 BTU | 9554 BTU |
| Voltage | 100-240 VAC | 100-240 VAC | 200-240 VAC |
| Frequency | $50 / 60 \mathrm{~Hz}$ | $50 / 60 \mathrm{~Hz}$ | $50 / 60 \mathrm{~Hz}$ |
| Amperage | 7.6-3.0A ( $\times 2$ ) | 7.6-3.0A ( $\times 2$ ) | 8.6-4.3A (x2) |
| Environmental operating conditions | SC100 | SC120 | SC180 |
| Operating temperature | $10^{\circ}$ to $35^{\circ} \mathrm{C}\left(50^{\circ}\right.$ to $\left.95^{\circ} \mathrm{F}\right)$ with no direct sunlight on the equipment; maximum temperature gradation of $20^{\circ} \mathrm{C}$ per hour |  |  |
| Non-operating temperature | -40 to $65^{\circ} \mathrm{C}\left(-40\right.$ to $\left.149^{\circ} \mathrm{F}\right)$ at a maximum altitude of $12,000 \mathrm{~m}(39,370 \mathrm{ft})$ |  |  |
| Operating humidity ranges (noncondensing) | $10 \%$ to $80 \%$ (non-condensing) with $29^{\circ} \mathrm{C}\left(84.2^{\circ} \mathrm{F}\right)$ maximum dew point |  |  |
| Non-operating humidity (noncondensing) | $5 \%$ to $95 \%$ (non-condensing) with $33^{\circ} \mathrm{C}\left(91^{\circ} \mathrm{F}\right)$ maximum dew point |  |  |
| Inlet type | 0 to $3,048 \mathrm{~m}(0$ to $10,000 \mathrm{ft}) \mathrm{NOTE}$ : Up to $35^{\circ} \mathrm{C}$ maximum temperature is reduced by $1^{\circ} \mathrm{C} / 300 \mathrm{~m}\left(1^{\circ} \mathrm{F} / 547 \mathrm{ft}\right)$ above $950 \mathrm{~m}(3,117 \mathrm{ft})$ |  |  |

## 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. ${ }^{3}$ For more information, visit Dell.com/OEM.
${ }^{1}$ Available with the SC9000, SC8000 and SC4020 controller environments. The SCV2000 offers up to 168 drives and 504TB.
${ }^{2}$ Requires $3.5^{\prime \prime}$ drive carriers for $2.5^{\prime \prime}$ drives.
${ }^{3}$ OEM-ready available on certain models.

## Learn More at Dell.com/SCseries

