

DELL EMC SC SERIES EXPANSION ENCLOSURES

Versatile, high-performance storage

SC All-Flash



SC Hybrid



Dell EMC SC Series Expansion Enclosures

SCALE ON DEMAND

Dell EMC SC Series expansion enclosures help you store more data and reduce overall TCO by seamlessly increasing the capacity of your SC arrays. Extend the value of each storage investment with enterprise-ready solutions designed to maintain great performance, even as your environment scales to multiple petabytes per array.¹

FUTURE FLEXIBILITY

Intermix different drive types (SAS, NL-SAS and SSD) in the same enclosure, with a variety of expansion form factor options, including ultra-dense enclosures. 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

SC Series expansion enclosures also help lower power requirements and protect your data with high-efficiency, hot-swappable power supplies and advanced cooling. Each enclosure helps you leverage SC Series technology advantages, such as Federation, Intelligent Data Reduction and RAID tiering to lower costs and save storage space. Additionally, award-winning installation and support services ensure deployment goes smoothly and your SC environment continues to meet your needs over time.

Specifications below are arranged in the following sections.

| 12Gb SAS Expansion for | 6Gb SAS Expansion for | 12Gb Expansion for SCv3000 Series | 6Gb Expansion for SCv2000 Series |
|---------------------------|--------------------------|---|--|
| SC9000 | SC9000 | | |
| SC7020 | SC8000 | | |
| SC5020 | SC7020 | | |
| SC7020F | SC4020 | | |
| SC5020F | | | |

12Gb SAS Expansion for SC9000, SC7020, SC5020, SC7020F, SC5020F

| | SC400 | SC420 | SC420F | SC460 |
|--|---|--|--|---|
| SUPPORTED CONTROLLERS | SC9000, SC7020, SC5020 | SC9000, SC7020, SC5020 | SC7020F, SC5020F | SC9000, SC5020, SC7020, |
| CONTROLLER-ENCLOSURE CONNECTION (DUAL MODULES) | 12Gb SAS | 12Gb SAS | 12Gb SAS | 12Gb SAS |
| DRIVE SLOT SIZE | 3.5"² | 2.5" | 2.5" | 3.5" |
| MAX DRIVES PER ENCLOSURE | 12 | 24 | 24 | 60 |
| MAX RAW CAPACITY PER ENCLOSURE | 120TB | 368.64TB | 368.64TB | 600TB |
| FORM FACTOR | 2U | 2U | 2U | 4U (5U with cable mgmt) |
| INTERMIXED DRIVE TYPE SUPPORT | Yes | Yes | Yes | 7.2K HDD only |
| SAS DRIVE SUPPORT (Available on new enclosure purchases) | 3.5" HDD 4TB, 7.2K 6TB, 7.2K 6TB, 7.2K SED 8TB, 7.2K 10TB, 7.2K 10TB, 7.2K SED | 2.5" HDD 600GB, 15K 600GB, 15K SED 1.2TB, 10K 900GB, 15K SED 900GB, 15K 900GB, 10K 1TB, 7.2K 1.8TB, 10K 1.8TB, 10K SED 2.5" Write-intensive SSD 800GB 1.6TB 1.6TB SED 2.5" Read-intensive SSD 960GB 1.92TB 1.92TB SED 3.84TB 7.68TB 15.36TB | 2.5" Write-intensive SSD 800GB 1.6TB 1.6TB SED 2.5" Read-intensive SSD 960GB 1.92TB 1.92TB SED 3.84TB 7.68TB 15.36TB | 3.5" HDD 6TB, 7.2K 8TB, 7.2K 10TB, 7.2K 10TB, 7.2K SED |

| | SC400 | SC420 | SC420F | SC460 |
|--|---|--|--|--|
| CHASSIS | | | | |
| HEIGHT X WIDTH X DEPTH | 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) | 8.7 cm (3.43 in) x 48.2 cm (18.98 in) x 54.1 cm (21.30 in) | 22.23 cm (8.75 in)w/cable mgmt tray 17.5 cm(6.89 in)w/o tray x 44.45 cm (17.5 in) x 92.46 cm (36.4 in) fully configured. 87.63 cm (34.5 in) chassis only. |
| WEIGHT AT MAXIMUM CONFIGURATION | 28.59 kg (63.03 lb) | 24.2 kg (53.35 lb) | 24.2 kg (53.35 lb) | 102.05 kg (225 lb) |
| WEIGHT AT EMPTY | 9.0 kg (19.84 lb) | 8.8kg (19.4 lb) | 8.8 kg (19.4 lb) | 62 kg (136.68 lb) |
| RACK SUPPORT | ReadyRails™ II static rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting | | | Titan 1M/Titan-D 1.2M |
| POWER | | | | |
| POWER/WATTAGE | Two 600W hot-swappable, redundant power supplies; 450W maximum draw | | | Two 1600W hot-swappable, redundant power supplies; 1600W maximum power |
| HEAT DISSIPATION | 2,047 BTU/hr (at 600W) 1,621 BTU/hr | | | 2177 BTU/hr (at 2184W) 6,144 BTU/hr |
| VOLTAGE | 100-240 VAC, auto sensing | | | 200 - 240 VAC± 10% auto sensing |
| FREQUENCY | 50/60 Hz | | | |
| AMPERAGE | 8.6 A at 100 V, 4.3 A at 240 V Maximum power draw: 74 amps | | | 7.4 A at 241V Max |
| ENVIRONMENTAL OPERATING CONDITIONS | | | | |
| OPERATING TEMPERATURE | SC400: 5° to 35°C (41° to 95) with a maximum temperature gradation of 10°C per hour SC420: 10° to 35°C (50° to 95) with a maximum temperature gradation of 10°C per hour For altitudes above 2950 ft (900 m), the maximum operating temperature is derated 1°F per 550 ft (168 m). | | | 5° to 40°C (41°F to 104°F) |
| NON-OPERATING TEMPERATURE | -40 to 65°C (-40 to 149°F) with a maximum temperature gradation of 20°C per hour | | | -40°C to 65°C (-40°F to 149°F) |
| OPERATING HUMIDITY | 8% to 85% (noncondensing) with a maximum humidity gradation of 10% per hour 20 to 80% | | | |
| NON-OPERATING HUMIDITY (NON-CONDENSING) | 5% to 95% (non-condensing) | | | 10 to 90% |
| OPERATING ALTITUDE | -16 to 3048 m (-50 to 10,000 ft) | | | -16 to 2300 m (-50 to 7500ft) |
| NON-OPERATING ALTITUDE | -16 to 10,600 m (-50 to 35,000 ft) | | | -16 to 10,600 m (-50 to 35,000ft) |

6Gb SAS Expansion for SC9000, SC8000, SC7020, SC4020

| | SC200 | SC220 | SC280 |
|--|---|---|--|
| SUPPORTED CONTROLLERS | SC9000, SC8000, SC7020, SC4020 | SC9000, SC8000, SC7020, SC4020 | SC9000, SC8000, SC7020, SC4020 |
| CONTROLLER-ENCLOSURE CONNECTION (DUAL MODULES) | 6Gb SAS | 6Gb SAS | 6Gb SAS |
| DRIVE SLOT SIZE | 3.5" | 2.5" | 3.5" |
| MAX DRIVES PER ENCLOSURE | 12 | 24 | 84 |
| MAX RAW CAPACITY PER ENCLOSURE | 120TB | 92.16TB | 840TB |
| FORM FACTOR | 2U | 2U | 5U |
| INTERMIXED DRIVE TYPE SUPPORT | Yes | Yes | 7.2K HDD only |
| SAS DRIVE SUPPORT (Available on new enclosure purchases) | 3.5" HDD 4TB, 7.2K 6TB, 7.2K 6TB, 7.2K SED 8TB, 7.2K 10TB, 7.2K | 2.5" HDD 600GB, 15K 600GB, 15K SED 900GB, 10K 900GB, 15K 900GB, 15K SED 1TB, 7.2K 1.2TB, 10K 1.2TB, 10K SED 1.8TB, 10K 1.8TB, 10K SED 2.5" Write-intensive SSD 400GB 800GB 1.6TB 1.6TB SED 2.5" Read-intensive SSD 480GB 960GB 1.92TB 1.92TB SED 3.84TB | 3.5" HDD 4TB, 7.2K 6TB, 7.2K 6TB, 7.2K SED 10TB, 7.2K |

| | SC200 | SC220 | SC280 |
|--|-------|-------|-------|
|--|-------|-------|-------|

CHASSIS

| | | | |
|--|---|--|---|
| HEIGHT X WIDTH X DEPTH | 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) | 22.23 cm (8.8 in) x 48.26 cm (19 in) x 91.44 cm (36 in) |
| WEIGHT AT MAXIMUM CONFIGURATION | 28.39 kg (62.6 lb) | 23.31 kg (51 lb) | 130.7 kg (287.5 lb) |
| WEIGHT AT EMPTY | 8.84 kg (19.5 lb) | 8.61 kg (19 lb) | 62 kg (136.68 lb) |
| RACK SUPPORT | 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 |

POWER

| | | |
|-------------------------|---|--|
| POWER/WATTAGE | Two 700W 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 BTU/hr | 7,455 BTU/hr (at 2184W) 6,144 BTU/hr |
| VOLTAGE | 100-240 VAC, auto sensing | 208 - 240 VAC, auto sensing |
| FREQUENCY | 50/60 Hz | |
| AMPERAGE | 8.6 A at 100 V, 4.3 A at 240 V Maximum power draw: 74 amps | 7.4 A at 241V Max |

ENVIRONMENTAL OPERATING CONDITIONS

| | | |
|----------------------------------|--|-----------------------------------|
| OPERATING TEMPERATURE | 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) |
| NON-OPERATING TEMPERATURE | -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) |
| OPERATING HUMIDITY | 10% to 80% (non-condensing) with 29°C (84.2°F) maximum dew point | |
| NON-OPERATING HUMIDITY | 5% to 95% (non-condensing) with 33°C (91°F) maximum dew point | |
| OPERATING ALTITUDE | -16 to 3048 m (-50 to 10,000 ft) | -16 to 2300 m (-50 to 7500ft) |
| NON-OPERATING ALTITUDE | -16 to 10,600 m (-50 to 35,000 ft) | -16 to 10,600 m (-50 to 35,000ft) |

12Gb Expansion for SCv3000 Series

| | SCv300 | SCv320 | SCv360 |
|------------------------------|------------------|------------------|------------------|
| SUPPORTED CONTROLLERS | SCv3000, SCv3020 | SCv3000, SCv3020 | SCv3000, SCv3020 |

| | SCv300 | SCv320 | SCv360 |
|--|--|--|---|
| CONTROLLER-ENCLOSURE CONNECTION (DUAL MODULES) | 12Gb SAS | | |
| DRIVE SLOT SIZE | 3.5" | 2.5" | 3.5" |
| MAX DRIVES PER ENCLOSURE | 12 | 24 | 60 |
| MAX RAW CAPACITY PER ENCLOSURE | 120TB | 92.16TB | 600TB |
| FORM FACTOR | 2U | 2U | 4U (5U with cable mgmt. tray) |
| INTERMIXED DRIVE TYPE SUPPORT | Yes | Yes | Yes |
| SAS DRIVE SUPPORT (Available on new enclosure purchases) | 3.5" HDD 1.8TB, 10K 4TB, 7.2K 6TB, 7.2K 8TB, 7.2K 10TB, 7.2K 10TB, 7.2K SED | 2.5" HDD 600GB, 15K 900GB, 15K 900GB, 15K SED 900GB, 10K 900GB, 10K 1TB, 7.2K 1.2TB, 10K 1.8TB, 10K 1.8TB, 10K SED 2.5" Write-intensive SSD 800GB 1.6TB 1.6TB SED 2.5" Read-intensive SSD 480GB 960GB 1.92TB 1.92TB SED 3.84TB | 3.5" HDD 4TB, 7.2K 6TB, 7.2K 8TB, 7.2K 10TB, 7.2K 10TB, 7.2K SED |
| CHASSIS | | | |
| HEIGHT X WIDTH X DEPTH | 8.79 cm (3.46 in) x 48.2 cm (18.98 in) x 59.4 cm (22.67 in) | 8.79 cm (3.46 in) x 48.2 cm (18.98 in) x 54.1 cm (21.3 in) | 22.23 cm (8.75 in) w/cable mgmt tray 17.5 cm(6.89 in) w/o tray x 44.45 cm (17.5 in) x 92.46 cm (36.4 in) fully configured. 87.63 cm (34.5 in) chassis only. |
| WEIGHT AT MAXIMUM CONFIGURATION | 28.59 kg (63.03 lb) | 24 kg (53 lb) | 102.05 kg (225 lb) |

| | SCv300 | SCv320 | SCv360 |
|------------------------|---|-------------------------------|--------------------------------|
| WEIGHT AT EMPTY | 9 kg (19.84 lb) minus drives | 8.8 kg (19.4 lb) minus drives | 62 kg (136.68 lb) minus drives |
| RACK SUPPORT | ReadyRails™ II static rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting | | Titan 1M/Titan-D 1.2M |

POWER

| | | | |
|-------------------------|---------------|---------------|-------------------|
| POWER/WATTAGE | 580W | 580W | 1660W |
| HEAT DISSIPATION | 1980 BTU | 1980 BTU | 2177 BTU |
| VOLTAGE | 100-240 VAC | 100-240 VAC | 200-240 VAC |
| FREQUENCY | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| AMPERAGE | 7.6-3.0A (x2) | 7.6-3.0A (x2) | 7.4 A at 241V Max |

ENVIRONMENTAL OPERATING CONDITIONS

| | | |
|----------------------------------|---|-----------------------------------|
| OPERATING TEMPERATURE | SC400: 5° to 35°C (41° to 95) with a maximum temperature Gradation of 10°C per hour. SC420: 10° to 35°C (50° to 95) with a maximum temperature Gradation of 10°C per hour. For altitudes above 2950 ft (900 m), the maximum operating temperature is derated 1°F per 550 ft (168 m). | 5° to 40°C (41°F to 104°F) |
| NON-OPERATING TEMPERATURE | -40 to 65°C (-40 to 149°F) with a maximum temperature gradation of 20°C per hour | -40°C to 65°C (-40°F to 149°F) |
| OPERATING HUMIDITY | 8% to 85% (noncondensing) with a maximum humidity gradation of 10% per hour 20 to 80% | |
| NON-OPERATING HUMIDITY | 5% to 95% (non-condensing) | 10 to 90% |
| OPERATING ALTITUDE | -16 to 3048 m (-50 to 10,000 ft) | -16 to 2300 m (-50 to 7500ft) |
| NON-OPERATING ALTITUDE | 16 to 10,600 m (-50 to 35,000 ft) | -16 to 10,600 m (-50 to 35,000ft) |

6Gb Expansion for SCv2000 Series

| | SC100 | SC120 | SC180 |
|---|------------------|------------------|---------|
| SUPPORTED CONTROLLERS | SCv2000, SCv2020 | SCv2000, SCv2020 | SCv2080 |
| CONTROLLER-ENCLOSURE CONNECTION (DUAL MODULES) | 6Gb SAS | | |

| | SC100 | SC120 | SC180 |
|--|---|--|--|
| DRIVE SLOT SIZE | 3.5" | 2.5" | 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 RAW CAPACITY PER ENCLOSURE | 72TB | 92.16TB | 504TB |
| FORM FACTOR | 2U | 2U | 5U |
| INTERMIXED DRIVE TYPE SUPPORT | Yes | Yes | Yes |
| SAS DRIVE SUPPORT (Available on new enclosure purchases) | 3.5" HDD 2TB, 7.2K 4TB, 7.2K 6TB, 7.2K 8TB, 7.2K 10TB, 7.2K | 2.5" HDD 600GB, 15K 900GB, 15K 600GB, 10K 900GB, 10K 1TB, 7.2K 1.2TB, 10K 1.8TB, 10K 2.5" Write-intensive SSD 400GB 800GB 1.6TB 2.5" Read-intensive SSD 480GB 960GB 1.92TB 3.84TB | 3.5" HDD 2TB, 7.2K 4TB, 7.2K 6TB, 7.2K 8TB, 7.2K 10TB, 7.2K 2.5" HDD 1.2TB, 10K 1.8TB, 10K |

CHASSIS

| | | | |
|--|---|---|---|
| HEIGHT X WIDTH X DEPTH | 8.7 cm (3.43 in) x 48.2 cm (18.98 in) x 54.1 cm (21.3 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) |
| WEIGHT AT MAXIMUM CONFIGURATION | 28.9 kg (63.9 lb) | 24 kg (53 lb) | 130.1 kg (287 lb) |
| WEIGHT AT EMPTY | 20.6 kg (45.4 lb) minus drives | 18.7 kg (41 lb) minus drives | 62.1kg (137 lb) minus drives |
| RACK SUPPORT | 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 |

POWER

| | | | |
|-------------------------|-------------|-------------|-------------|
| POWER/WATTAGE | 580W | 580W | 2800W |
| HEAT DISSIPATION | 1980 BTU | 1980 BTU | 9554 BTU |
| VOLTAGE | 100-240 VAC | 100-240 VAC | 200-240 VAC |

| | SC100 | SC120 | SC180 |
|------------------|---------------|---------------|---------------|
| FREQUENCY | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| AMPERAGE | 7.6-3.0A (x2) | 7.6-3.0A (x2) | 8.6-4.3A (x2) |

ENVIRONMENTAL OPERATING CONDITIONS

| | |
|--|--|
| OPERATING TEMPERATURE | 10° to 35°C (50° to 95°F) with no direct sunlight on the equipment; maximum temperature gradation of 20°C per hour |
| NON-OPERATING TEMPERATURE | -40 to 65°C (-40 to 149°F) at a maximum altitude of 12,000 m (39,370 ft) |
| NON-OPERATING TEMPERATURE | 10% to 80% (non-condensing) with 29°C (84.2°F) maximum dew point |
| NON-OPERATING HUMIDITY (NON-CONDENSING) | 5% to 95% (non-condensing) with 33°C (91°F) maximum dew point |
| INLET TYPE | 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. Available on specific models. For more information, visit Dell.com/OEM.

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

CONTACT US

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



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