

Dota-000335-000 | Rev. 02



Description

The OpenFlex™ Data24 is a 2U rack mounted data storage enclosure built on the OpenFlex platform. OpenFlex is Western Digital's architecture that supports Open Composable Infrastructure (OCI). The OpenFlex™ Data24 is a Just-a-Bunch-Of-Flash (JBOF) platform that leverages this OCI approach in the form of disagreggated data storage using NVMe-over-Fabrics (NVMe-oF™). NVMe-oF is a networked storage protocol that allows storage to be disaggregated from compute to make that storage widely available to multiple applications and hosts. By enabling applications to share a common pool of storage capacity, data can be easily shared between applications, or needed capacity can be allocated to an application regardless of location. Utilizing NVMe™ devicelevel performance, NVMe-oF promises to deliver the lowest end-to-end latency from application to shared storage. NVMeoF enables composable infrastructures to deliver the data locality benefits of NVMe (low latency, high performance) while providing the agility and flexibility of sharing storage and compute.

Features

- 368TB Max Storage Capacity
- 200V 240V Input Voltages
- Dual 2000W PSUs
- 100Gbps NVMe-oF
- 2U Form Factor
- Operational Temperature: 10°C to 35°C
- 29.7 kg / 65.5 lbs.

Safety Compliance

- UL60950-1 Second Edition
- CSA 60950-1-03, Second Edition
- EN 60950-1, Second Edition
- IEC 60950-1, Second Edition
- CE Low Voltage Directive
- BSMI CNS14336
- TR CU 004/2011

Electromagnetic Compatibility (EMC)

• EN

Emissions

- FCC CFR 47 Part 15, Subpart B
- ICES-003
- EN 55032
- CISPR 32
- CE EMC Directive 2014/30/EU
- VCCI V-3
- BSMI CNS14338
- KS C 9832
- AS/NZS CISPR 32
- TR CU 020/2011

Immunity

- EN 61000-3-2 Harmonic Current Emissions
- EN 61000-3-3 Voltage Fluctuations and Flicker
- EN 55035
- KS C 9835
- EN 61000-4-2 ESD
- EN 61000-4-3 Radiated Immunity
- EN 61000-4-4 EFT
- EN 61000-4-5 Surge
- EN 61000-4-6 RF Common Mode
- EN 61000-4-8 Power Frequency Magnetic Field
- EN 61000-4-11 Voltage Dips and Interruptions

Electrical Specifications

| Specification | Value | |
|----------------------------------|--|--|
| Max Power Consumption | 750W | |
| Typical Power Consumption | ~550W | |
| Input Voltage | 200V - 240V | |
| PSU Connector Type | C14 | |
| Inrush Current Maximum (per PSU) | AC line inrush current shall not exceed 40A peak, for up to one-quarter of the AC cycle after which, the input current should be no more than the specified maximum input current. | |
| PSU Efficiency | 80 Plus Platinum | |



Datasheet D018-000335-000 | Rev. 02

Environmental Specifications

| Specification | Non-Operational | Non-Operational Operational | |
|----------------------------|--|--|--|
| Temperature | 5°C to 45°C | 10°C to 35°C | |
| Temperature Gradient | 30°C/hr Maximum | 5°C per 15 minutes | |
| Temperature De-rating | 1°C per 300m above 3000m | 1°C per 300m above 900m | |
| Relative Humidity | 5-95% Non-Condensing | 8-80% Non-Condensing | |
| Relative Humidity Gradient | 30% per hour maximum | 30% per hour maximum | |
| Altitude | -300m to 12,000m / -984 ft. to 39,370 ft | -300m to 3048m / -984 ft. to 10,000 ft. | |
| Cooling | N/A | 5 Dual Rotor System Fans (N+1 Supported) | |

Mechanical Specifications

| Specification | Non-Operational | Operational | |
|----------------------------|---|---|--|
| Shock | 10G, 11ms half sine; 3 positive and 3 negative pulses in X, Y, and Z axes. | 5G, 11ms half sine; positive and 3 negative pulses in X, Y, and Z axes. | |
| Vibration | Linear Random: 0.54 Grms; 5-500 Hz; 10 minutes each axis in X, Y, and Z Linear Random: 0.54 Grms; 1-200 Hz; 60 minutes in Z axis. Linear Random: 0.80 Grms; 2 - 200Hz; 15 minutes in Z axis Swept Sine: 0.75 Grms, 0 - peak swept sine; 5 - 500Hz; 1 complete sweep @ 1/2 octave per minute | Linear Random: 0.15 Grms 5-500 Hz 10 minutes each axis in X, Y and Z Swept Sine: 0.10 G, 0 - peak, 5-500 Hz 0.5 octaves/min, approx. 13 minutes each axis | |
| Weight | 29.7 kg / 65.5 lbs. | | |
| Dimensions | W: 450 mm x L: 711.2 mm x H: 90 mm / W: 17.72 in. x L: 28 in. x H: 3.54 in. | | |
| Required Rack Depth | 1000 mm (39.4 in.) of usable rack space, door to door | | |
| Required Rack Width | 450mm (17.72in.) with 465mm (18.31in.) \pm 1.5mm nominal hole spacing. See EIA-310 Rack Standard | | |
| Rack Units (U) | 2U | | |
| Vertical Rack Rail Spacing | 700 mm – 850 mm / 28.26 in. – 33.46 in. | | |

Performance Specifications

| Specification | Value |
|-------------------------------|-----------------|
| Number of Drive Slots | 24 |
| Data Transfer Rates | 100Gbps NVMe-oF |
| Max Raw Data Storage Capacity | 368TB |



Datasheet D018-000335-000 | Rev. 02

Supported SKUs

| List of Supported SKUs | | |
|--|----------|---------|
| Component | Capacity | SKU |
| OpenFlex Data24-12 SN840 6x100GbE nTAA PCIe RI-1DW/D SE | 23.04 TB | 1ES2027 |
| OpenFlex Data24-12 SN840 6x100GbE nTAA PCle RI-1DW/D SE | 46.08TB | 1ES2025 |
| OpenFlex Data24-24 SN840 2x100GbE nTAA PCle RI-3DW/D SE | 76.8TB | 1ES2055 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCle RI-3DW/D SE | 76.8TB | 1ES1986 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCle RI-3DW/D ISE | 76.8TB | 1ES2129 |
| OpenFlex Data24-24 SN840 2x100GbE nTAA PCle RI-1DW/D SE | 92.16TB | 1ES2052 |
| OpenFlex Data24-24 SN840 2x100GbE nTAA PCle RI-1DW/D TCG | 92.16TB | 1ES2079 |
| OpenFlex Data24-12 SN840 6x100GbE nTAA PCle RI-1DW/D SE | 92.16TB | 1ES2026 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCIe RI-1DW/D SE | 92.16TB | 1ES1913 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCIe RI-1DW/D ISE | 92.16TB | 1ES2131 |
| OpenFlex Data24-24 SN840 6x100GbE TAA PCIe RI-1DW/D TCG | 92.16TB | 1ES2116 |
| OpenFlex Data24-24 SN840 2x100GbE nTAA PCle RI-3DW/D SE | 153.6TB | 1ES2056 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCle RI-3DW/D SE | 153.6TB | 1ES2040 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCle RI-3DW/D ISE | 153.6TB | 1ES2130 |
| OpenFlex Data24-24 SN840 2x100GbE nTAA PCle RI-1DW/D SE | 184.32TB | 1ES2053 |
| OpenFlex Data24-12 SN840 6x100GbE nTAA PCle RI-1DW/D SE | 184.32TB | 1ES2033 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCIe RI-1DW/D SE | 184.32TB | 1ES1915 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCle RI-1DW/D ISE | 184.32TB | 1ES2132 |
| OpenFlex Data24-12 SN840 6x100GbE nTAA PCle RI-1DW/D ISE | 184.32TB | 1ES2134 |
| OpenFlex Data24-24 SN840 6x100GbE TAA PCIe RI-1DW/D TCG | 184.32TB | 1ES2117 |
| OpenFlex Data24-24 SN840 2x100GbE nTAA PCle RI-1DW/D SE | 368.64TB | 1ES2054 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCIe RI-1DW/D SE | 368.64TB | 1ES1914 |
| OpenFlex Data24-24 SN840 6x100GbE nTAA PCle RI-1DW/D ISE | 368.64TB | 1ES2133 |
| OpenFlex Data24-24 SN840 6x100GbE TAA PCle RI-1DW/D TCG | 368.64TB | 1ES2118 |

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