

Sustainability on Dell PowerEdge Servers



Dell Technologies aims to create more sustainable products and services while also lowering operating costs.

IT sustainability



IT sustainability in the Dell PowerEdge server portfolio is reflected in product-design features that improve energy efficiency, provide management tools to optimize energy consumption, use recycled materials and are validated by recognized eco labels.

First Tier 1 vendor



to measure server carbon emissions in **real time**



to **measure and track** server carbon emissions on production servers¹

Design features

Drive energy efficiency and infrastructure consolidation.

Multi-vector cooling, liquid cooling and thermal design capabilities are designed to fit your location (data center, edge, specialized environment).



One new PowerEdge R7625 Server can do the work of five legacy servers, with up to **64% energy savings**.²



PowerEdge R750 has an optimized thermal design that **improves energy efficiency**.⁴



High-performance fans and new CPU heat sinks keep the system at optimal temperatures without using more energy than is needed.

Up to **95°F**

PowerEdge servers deliver **power-efficient operation**.

23°F/-5°C

131°F/55°C



The supported temperature range of PowerEdge servers in edge locations from the factory floor to remote cellular base stations.³

Management tools

Provide visibility and control to reduce energy consumption.

Dell OpenManage Enterprise (OME) Power Manager



Generate power-usage insights, simplify IT and improve decision-making.

Get useful information that allows you to quickly respond to power issues, improve overall power usage and track greenhouse gas emissions.

Up to **88%**

less time to cap power on eight-node servers vs. doing it manually⁶

Up to **96%**

less time to collect power data vs. doing it manually⁵



The Power Manager Emission Conversion Factor feature lets you approximate carbon dioxide emission levels based on energy consumed.



The Power Manager 3.0 plug-in lets you calculate energy and carbon emissions cost per unit for devices managed and monitored through the OME console.

Sustainable materials and eco labels

We use recycled materials to make parts for new products.



PowerEdge R750 has 12% recycled steel.⁶

Recognized eco labels validate our environmental leadership.



PowerEdge servers are the first in the industry to achieve EPEAT Silver.⁷

PowerEdge has more EPEAT-registered and ENERGY STAR®-certified servers than any other vendor.⁸

Sustainability is a joint effort

By increasing energy efficiency, reducing the environmental impact and maximizing performance, PowerEdge servers can help support your business and climate goals. When we all prioritize sustainability, we are driving business outcomes and protecting the planet.

Learn more at Dell.com/ESG | Dell.com/IT-Sustainability

¹ Based on Dell analysis, in May 2020, of Tier 1 server vendors offerings for systems management and any features that would allow a customer to track and measure server carbon emissions as compared to the Dell Open Manage Enterprise Power Manager 3.0 (released in May 2022).

² Based on Dell internal testing that used the VMWare® VAMT tool to migrate 380 VMs from 5x 2U servers with Intel XEON® 8180 processors to 1 Dell PowerEdge R7625 server with the AMD EPYC™ 4th Gen 9654 processors on 11/5/2022. Actual performance may vary.

³ Based on internal Dell testing conducted in the Thermal & Efficiency lab for GR53, GR1955 and GR2109 compliance over 65° to 59°C temperature range. CLM-007145.

⁴ Based on Dell internal analysis comparing DDR5 memory on AMD EPYC 4th gen, running at 4800 MT/s and DDR4 memory on AMD EPYC 3rd gen running at 3200 MT/s. Actual results will vary. CLM-005953.

⁵ Principled Technologies report commissioned by Dell Technologies, Rein in power consumption faster and more easily, November 2022.

⁶ Based on internal analysis, October 2022. CLM-005953

⁷ Based on internal analysis, March 2023. Applies to PowerEdge C6620, PowerEdge R660, PowerEdge R6615, PowerEdge 6625, PowerEdge R760, PowerEdge 7615, PowerEdge 7625, PowerEdge XR4000r, PowerEdge XR4000z. CLM-007590.

⁸ Based on Dell analysis of entries on www.energystar.gov with Dell having 57 entries compared to 53 by Lenovo®, 50 by HPE®, 18 by Cisco® and 11 by SuperMicro® as of 3/24/2023. Dell analysis of www.epeat.net showed Dell having 530 entries out of a total of 618 entries for servers as of 4/19/2023.