

NS224 carbon footprint report



NS224 storage shelf

NetApp® AFF A-Series all-flash systems deliver leading performance and efficiency for the most demanding business-critical applications. To enable scalable capacity to meet future growth demands, NetApp offers external storage shelves options that support up to 24 internal SSDs in a 2U chassis. The NS224 features NVMe SSDs and 100GbE connectivity to AFF systems with raw capacity points scaling from 122.8TB to 367.2TB and supported on all NetApp AFF systems.

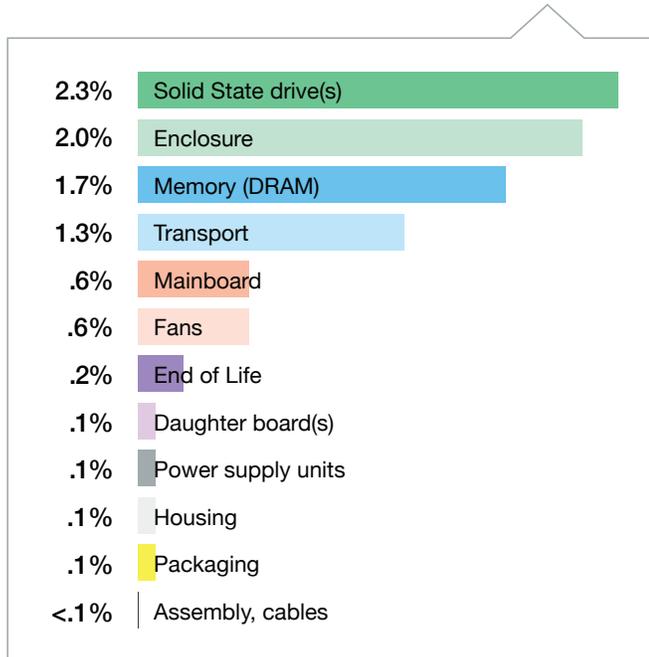
Data centers consume a significant amount of electricity and contribute to global greenhouse gas emissions. NetApp is providing lifetime carbon footprint estimates for our storage solutions to help customers better understand the environmental impacts of our storage systems.

NetApp uses Product Attribute to Impact Algorithm (PAIA) to calculate the carbon emissions associated with a product through its lifecycle, including acquisition of raw materials, manufacturing, distribution, product use, and final disposition. PAIA is a streamlined lifecycle assessment (LCA) methodology for assessing environmental impacts associated with the entire lifecycle of a product. The PAIA model was developed by the Materials Systems Laboratory at the Massachusetts Institute of Technology (MIT) and is a leading and globally accepted methodology for streamlining the product carbon footprint process.

PAIA LCA analysis estimates are not meant to be used as a comparison of products from different suppliers. For more information about PAIA, its intended uses, and its limitations, see this [overview](#).

Estimated lifetime carbon footprint for NS224: 13,800 kg CO₂e¹

The majority of a product’s lifetime carbon footprint is from its use. “Other” includes activities from upstream manufacturing/supply chain and downstream end of life.



Assumptions used in this analysis are shown in the table below.²

Use location³	EU
Country of origin	Hungary
Usage life	4 Years
Memory (HA)	64GB
CPU cores (HA)	8
SSD count	24
Weight	30.2 kg
Total energy consumption⁴	4380 kWh/year
Transportation	1500 km, air 600 km, truck

About NetApp

In a world full of generalists, NetApp is a specialist. We’re focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world’s biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services and applications to the right people—anytime, anywhere. www.netapp.com

¹ All estimates of environmental impact and/or carbon footprint are uncertain. PAIA analyses provide reasonable estimates of the carbon impact of products, along with a range of uncertainty of the results. Standard deviation for this analysis is +/- 2,570 kg CO₂.

² This analysis used PAIA version 1.3.2. Future results could change as the tool is updated.

³ Use location for this PAIA analysis is EU; actual emissions calculations are dependent on where the equipment is used (specific state/country).

⁴ Total energy consumption is based on the fiftieth percentile of power utilization being reported across all customer NS224 systems sending AutoSupport information into NetApp. The NS224 field population used in our power consumption analysis ranges across all possible configuration options and power utilization rates. For a more concise power consumption analysis of your NS224 storage systems, visit [NetApp Cloud Insights](#) to monitor, optimize, and secure your resources or [Harvest Environmental Reporting](#) tool.