Product Carbon Footprint

VS-U610I

Life Stage	Boundary	kgCO$_2$e
Materials acquisition & Pre-processing	Nature to Ace	285.3
Production	Assembly at Ace	175.2
Transportation	Distribution	181.6
Use	3 yr warranty	676.2
End of Life	Recycle and Landfill	84.4

- Intel Core i9-12900 16 Cores, 24 Threads, 30 MB Cache, 4.4 GHz
- 32GB Elite DDR4 3200MHz
- 500GB NVMe M.2
- 300W Power Supply

Explanation of Uncertainty:

There is limited free data available to assess Product Carbon Footprint (PCF) Emissions Factors (EF). Therefore, we make the best effort to select accurate EF's with the data available to us. Additionally, supplier cooperation plays a huge role in data gathering. Some limitations we faced in this process include resistance to providing information due to Confidential Business Information (CBI) or paywalls. We have broken down the data received so that we can most accurately establish a PCF. While we hold that this PCF is as accurate as possible, we recognize that the lack of exact physical data and various emissions factors can limit its accuracy. As more data becomes available and we can refine our analyses and processes to a fuller extent, future PCF assessments will reflect fewer uncertainties.

Report produced in November 2024 using most recently available data.

This product lifecycle greenhouse gas (GHG) assessment conforms to the WRI GHG Protocol Product Life Cycle Accounting and Reporting Standard.

For the purposes of this PCF, we have used the 3-year warranty as the lifetime of the product, which is industry standard.

We approximate annual electricity usage to be 600kWh.

Inputs used in the assessment:

Substance inventories, full material disclosures, bill of materials, physical weights of components, warranty information, corporate carbon footprint including electricity consumption, transportation analysis internal data, publicly available emissions factors from EPA and Climatiq, estimated product use hours, scientific papers and data, United Nations publications, and EPA electrical grid data.

1403 kgCO$_2$e