



Carbon Footprint of Products

CFP Declaration

Registration number : JR-BF-22007C

Japan EPD Program by SuMPO

Sustainable Management Promotion Organization

14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan

<https://ecoleaf-label.jp/>

Hitachi, Ltd. Hitachi Virtual Storage Platform E390



Functional unit

Per sales unit (per unit)

System boundary

- final products intermediate products

Main specifications of the product

All-Flash Array

- Controller chassis

HT-40SL-E390, HT-40SL-E390E

Up to 24 NVMe SSD

The suffix E means encryption model

Up to 1 unit

- Drive box

Drive box is not supported

- Assumed operating years : 5years

Registration#	JR-BF-22007C
PCR number	PA-520000-BF-01
PCR name	IT equipment
Publication date	3/18/2022
Verification date	3/4/2022
Verification method	Product-by-product
Verification#	JV-BF-22007
Expiration date	3/3/2027
PCR review was conducted by:	
Approval date	2/19/2021
PCR review panel chair	Ken Yamagishi Sustainable Management Promotion Organizetic
Third party verifier*	
	Yasuo Kozeki

Independent verification of data & declaration in accordance with ISO/TS14067

internal external

*Auditor's name is stated if system certification has been performed.

* The specifications listed are subject to change without notice due to product improvements.

Company Information

Hitachi, Ltd.

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1. Quantification results, and contents of the declaration

CFP quantification unit :

Parameter			Unit
CFP Quantification results		33,000	kg-CO₂eq
Breakdown	Raw material acquisition	1,500	kg-CO ₂ eq
	Production	580	kg-CO ₂ eq
	Distribution	45	kg-CO ₂ eq
	Use & maintenance	31,000	kg-CO ₂ eq
	End-of-Life	27	kg-CO ₂ eq
Value on CFP mark		33,000	kg-CO₂eq
Unit for the value on CFP mark		Per sales unit (per unit)	
Value on CFP mark		18.0	kg-CO ₂ eq/TB · Year
Unit for the value on CFP mark		Per TB · Year^{*1}	

*Quantification results may slightly differ from the sum of the breakdown due to rounding of fractions.

*1 The amount of CO₂ emissions per unit function. Divided CFP results by the storage capacity (TB) and the assumed service life (Years).

3. Supplementary environmental information

2. Additional information

<Products>

- Product Name : Hitachi Virtual Storage Platform E390

- Conditions for calculating CO₂eq emissions :

Calculated using 1 controller chassis (HT-40SL-E390) with 24 NVMe SSDs installed.

- Product type name of the scenario used :

Disk array (Solid State Drive(SSD) installed)

<Product main specifications>

Storage capacity^{*1} : 360 TB

Operating years^{*2} : 5 years

Drive type : Solid State Drive (NVMe SSD)

Drive interface : NVMe

Installed SSD : 24 units

- CO₂eq emissions :

-Per product : 33 t-CO₂eq

-Per 1TB · 1Year : 18 kg-CO₂eq/TB · Year

- Measurement conditions :

-Power during use is measured by the measurement method specified by certified PCR

(PA-520000-BF-01)

*1 The capacity is calculated as 1TB = 1,000,000,000,000 bytes

*2 The operating years were assumed to be the statutory useful life(5 years for computer/others)

4. Interpretation

- Greenhouse gas emissions at the use and maintenance stages are the largest, accounting for about 93% of the entire life cycle, and the influence of power consumption during use is large, so it can be said that energy-saving performance during use is a very important factor. Please note that the usage and maintenance stage may not be the same as the customer's terms of use because general conditions have been set and evaluated.
- In calculating CFP, we use our data for the amount of raw materials used, but since it is difficult to collect data at the time of manufacturing thousands of parts, we use general data at the time of manufacturing raw materials. Therefore, it may not reflect the unique characteristics of this product.

5. Assumptions of secondary data used

IDEA V2.1.3 , complemented by CO2 Emissions Intensity v1.10.

6. Remarks

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- For data quantification, please refer to PCR and Rules on quantification and declaration.
- Comparative assertion is permitted only when Rules on quantification and declaration are satisfied.
(Reference URL : <https://ecoleaf-label.jp/regulation/>)
- The CFP only addresses the single impact category of climate change and does not assess other potential social, economic and environmental impacts arising from the provision of a product.

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