## 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 E1090H



### **Functional unit**

Per sales unit (per unit)

## **System boundary**

■ final products □intermediate products

## Main specifications of the product

All-Flash Array

- Controller chassis

HT-40SM-E1090H Up to 1 unit

- Drive box

HT-F40SM-DBN (Up to 24 NVMe SSD)

Up to 4 units

HT-F40SM-DBS((Up to 24 SAS SFF SSD/HDD)

Up to 32 units

HT-F40SM-DBL (Up to 12 SAS LFF HDD)

Up to 32 units

HT-F40SM-DB60 (Up to 60 SAS LFF HDD).

Up to 16 units

\*The maximum installed drives represents

the case of connecting only a single type of drive box

The mix of the SAS/NVMe drive is excluded

- Assumed operating years : 5years
  - \* The specifications listed are subject to change without notice due to product improvements.

## **Company Information**

Hitachi, Ltd.

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	Registration#	JR-BF-22010C-A	
	PCR number	PA-520000-BF-01	
	PCR name	IT equipment	
	<b>Publication date</b>	3/18/2022	
	Verification date	3/4/2022	
	Verification method	Product-by-product	
	Verification#	JV-BF-22010	
	<b>Expiration date</b>	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.

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# 1. Quantification results, and contents of the declaration CFP quantification unit:

	Parameter		Unit
CF	P Quantification results	480,000	kg-CO₂eq
_	Raw material acquisition	17,000	kg-CO₂eq
N N	Production	5,800	kg-CO₂eq
kg	Distribution	240	kg-CO₂eq
Breakdown	Use & maintenance	460,000	kg-CO₂eq
"	End-of-Life	130	kg-CO₂eq
'	/alue on CFP mark	480,000	kg-CO₂eq
Unit	for the value on CFP mark	Per sales unit (per unit)	
'	/alue on CFP mark	4.2	kg-CO₂eq/TB · Year
Unit	for the value on CFP mark	Per TB · Year*1	

<sup>\*</sup>Quantification results may slightly differ from the sum of the breakdown due to rounding of fractions.

3. Supplementary environmental information

## 2. Additional information

- <Products>
- · Product Name: Hitachi Virtual Storage Platform E1090H
- Conditions for calculating CO₂eq emissions :
   Calculated using 1 controller chassis (HT-40SM-E1090H)
   and 32 drive boxes (HT-F40SM-DBS) with the maximum installed of 768 SAS SSDs
- Product type name of the scenario used :
   Disk array (Solid State Drive(SSD) installed)
  - <Product main specifications>
    Storage capacity\*1 : 23,113TB
    Operating years\*2 : 5 years

Drive type: Solid State Drive (SAS SSD)

Drive interface : SAS Installed drives : 768 units

 $\cdot$  CO2eq emissions :

-Per product: 480 t-CO<sub>2</sub>eq

-Per 1TB  $\cdot$  1Year : 4.2 kg-CO<sub>2</sub>eq/TB  $\cdot$  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)

 $<sup>^{*}1</sup>$  The amount of  $CO_2$  emissions per unit function. Divided CFP results by the storage capacity (TB) and the assumed service life (Years).

## 4. Interpretation

- Greenhouse gas emissions at the use and maintenance stages are the largest, accounting for about 95% 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 thesame 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

Date of change: April 25, 2022 Changes to the description of main specifications.

- 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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