



Hitachi, Ltd. Hitachi Virtual Storage Platform E1090



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-E1090A 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 SSD)
Up to 32 units

Registration#	JR-BF-22009C-A
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-22009
Expiration date	3/3/2027
PCR review was conducted by:	
Approval date	2/19/2021
PCR review panel chair	Ken Yamagishi Sustainable Management Promotion Organizatio
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 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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1. Quantification results, and contents of the declaration

CFP quantification unit :

Parameter			Unit
CFP Quantification results		160,000	kg-CO₂eq
Breakdown	Raw material acquisition	4,700	kg-CO ₂ eq
	Production	1,800	kg-CO ₂ eq
	Distribution	70	kg-CO ₂ eq
	Use & maintenance	150,000	kg-CO ₂ eq
	End-of-Life	42	kg-CO ₂ eq
Value on CFP mark		160,000	kg-CO₂eq
Unit for the value on CFP mark		Per sales unit (per unit)	
Value on CFP mark		11.0	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 E1090

- Conditions for calculating CO₂eq emissions :

Calculated using 1 controller chassis (HT-40SM-E1090A) and
4 drive boxes (HT-F40SM-DBN) with the maximum installed of 96 NVMe SSDs

- Product type name of the scenario used :
Disk array (Solid State Drive(SSD) installed)

<Product main specifications>

Storage capacity^{*1} : 2,880TB
Operating years^{*2} : 5 years
Drive type : Solid State Drive (SSD)
Drive interface : NVMe
Installed drives : 96 units

- CO₂eq emissions :
-Per product : 160 t-CO₂eq
-Per 1TB · 1Year : 11.0 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 96% 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

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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