



Hitachi, Ltd. Hitachi Virtual Storage Platform E790H

**Functional unit**

Per sales unit (per unit)

System boundary

- final products intermediate products

Main specifications of the product

All-Flash and Magnetic-Disc Array

- Controller chassis

HT-40SJ-E790H, HT-40SJ-E790EH

Up to 24 NVMe SSD

The suffix E means encryption model

Up to 1 unit

- Drive box

HT-F40SJ-DBS((Up to 24 SAS SFF SSD/HDD)

Up to 8 units

HT-F40SJ-DBL (Up to 12 SAS LFF HDD)

Up to 8 units

HT-F40SJ-DB60 (Up to 60 SAS LFF HDD)

Up to 8 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.

+81-3-5471-2745

Registration#	JR-BF-22004C
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-22004
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.



1. Quantification results, and contents of the declaration

CFP quantification unit :

Parameter			Unit
CFP Quantification results		160,000	kg-CO₂eq
Breakdown	Raw material acquisition	4,900	kg-CO ₂ eq
	Production	2,300	kg-CO ₂ eq
	Distribution	80	kg-CO ₂ eq
	Use & maintenance	150,000	kg-CO ₂ eq
	End-of-Life	46	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		4.9	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 E790H

- Conditions for calculating CO₂eq emissions :

Calculated using 1 controller chassis (HT-40SJ-E790H) with 24 NVMe SSDs installed and 8 drive boxes (HT-F40SJ-DBS) with the maximum installed of 192 SAS SSDs

- Product type name of the scenario used :

Disk array (Solid State Drive(SSD) installed)

<Product main specifications>

Storage capacity^{*1} : 6,480TB

Operating years^{*2} : 5 years

Drive type : Solid State Drive (NVMe SSD, SAS SSD)

Drive interfaces : NVMe/SAS

Installed drives : 216 units

- CO₂eq emissions :

-Per product : 160 t-CO₂eq

-Per 1TB · 1Year : 4.9 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 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 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

-

- 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.

Registration number : JR-BF-22004C