



EcoLeaf

Type III Environmental Declaration (EPD)

Registration number : JR-BF-24001E-A

Japan EPD Program by SuMPO

Sustainable Management Promotion Organization
14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan
<https://ecoleaf-label.jp/>

Fsas Technologies Inc.

PRIMERGY RX1440 M2



Functional unit

Per product

System boundary

☒ final products ☐ intermediate products

Raw material acquisition, Production, Distribution,
Use & maintenance, End-of-Life

Main specifications of the product

Product: PYR1442RAN

Rack-mounted Server

CPU: Mono Socket

AMD EPYC™ 9004 series processor

Dimensions: 435 × 739 × 43 (1U) mm

(Dimensions without protrusions)

Use period: 5 years

Company Information

Fsas Technologies Inc.

<https://eu.fsastech.com/eu/about-us/contact/>

Registration# JR-BF-24001E-A

PCR number PA-520000-BF-04

PCR name IT equipments

Publication date 2024/03/12

Verification date 2024/03/04

Verification method Product-by-product

Verification# JV-BF-24001

Expiration date 2029/03/03

PCR review was conducted by:

Approval date 2023/08/15

PCR review
panel chair Ken Yamagishi
(SuMPO)

Third party verifier*

Yuki Sakamoto

Independent verification of data & declaration in
accordance with ISO14025

☐ internal ☒ external

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

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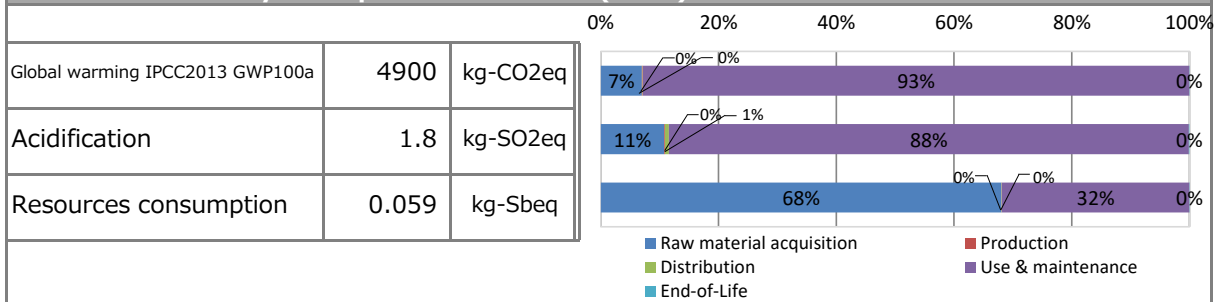
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1. Results of life cycle impact assessment (LCIA)



Parameter	stage	Unit	Total	Raw material acquisition	Production	Distribution	Use & maintenance	End-of-Life
Global warming IPCC2013 GWP100a		kg-CO ₂ eq	4.9E+03	3.4E+02	5.9E+00	3.6E+00	4.5E+03	1.5E+00
Ozone layer destruction		kg-CFC-11eq	3.2E-05	3.2E-05	2.6E-11	3.0E-11	2.0E-08	2.1E-09
Acidification		kg-SO ₂ eq	1.8E+00	2.0E-01	2.1E-03	1.2E-02	1.6E+00	2.0E-03
Urban area air pollution		kg-SO ₂ eq	8.0E-01	1.2E-01	8.9E-04	4.5E-03	6.8E-01	1.1E-03
Photochemical ozone		kg-C ₂ H ₄ eq	1.1E-01	4.0E-03	1.4E-04	2.2E-05	1.1E-01	1.4E-05
Toxic chemicals(cancer)		kg-C ₆ H ₆ eq	1.2E-01	9.1E-02	3.3E-05	1.2E-09	2.5E-02	2.7E-06
Toxic chemicals(chronic disease)		kg-C ₆ H ₆ eq	4.1E-03	4.0E-04	4.8E-06	1.7E-10	3.7E-03	2.3E-07
Aquatic toxicity		kg-C ₆ H ₆ eq	6.2E+00	5.0E-01	7.4E-03	2.7E-07	5.7E+00	3.4E-04
Biological toxicity		kg-C ₆ H ₆ eq	1.6E+02	1.9E+01	1.8E-01	6.5E-06	1.4E+02	9.1E-03
Eutrophication		kg-PO ₄ ³⁻ eq	1.8E-04	8.0E-05	3.9E-14	2.6E-14	3.0E-11	1.0E-04
Land use(Occupation)		m ² /year	1.4E+01	5.8E+00	1.0E-02	3.0E-01	7.7E+00	3.4E-02
Land use(Transformation)		m ²	2.7E-01	1.0E-01	2.0E-04	6.1E-03	1.5E-01	6.8E-04
Resources consumption		kg-Sbeq	5.9E-02	4.0E-02	2.5E-05	1.5E-05	1.9E-02	8.9E-06

2. Life cycle inventory analysis (LCI)

Parameter	Value	Unit
Non-renewable material resources	2.7E+01	kg
Non-renewable energy resources	1.9E+03	kg
Non-renewable energy resources	8.2E+04	MJ
Renewable material resources	3.9E+01	kg
Renewable primary energy	2.7E+03	MJ
Consumption of freshwater	9.6E-01	m ³
Emissions, carbon dioxide (fossil), air, unspecified	4.8E+03	kg
Resources, crude oil, 44.7MJ/kg, ground, Non-renewable energy resources	3.2E+02	kg
Emissions, volatile organic compound, air, unspecified	4.7E-04	kg

3. Material composition

Material	Value	Unit
Steel sheet	46	%
Aluminum	1	%
Copper	6	%
ABS	1	%
PC	2	%
PPS	3	%
Printed circuit board	20	%
Cardboard	16	%
Others	6	%



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5. Additional explanation

- Scenario Product Type: Computer Server (excluding the blade system)
- Product Name: PRIMERGY RX1440 M2 Model Name: PYR1442RAN
- Measurement conditions: Power consumption during use is measured by the measurement method specified by PCR (PA-520000-BF-04)
- Use period: 5 years
- Take-back rate: Calculated assuming 100%
- Use Location: Japan
- Product Configuration:
 - CPU: AMD EPYC processor 9124 x1
(Adjusted Peak Performance(APP): 0.2304WT, Gigaflops: 768 GFLOPS)
 - DIMM : 16GB DDR5 x12
 - HDD : 2.5inch 2.4TB x2

6-1. Supplementary environmental information

Compliant with the International Energy Star Program Ver4.0. It also complies with the European RoHS Directive.

7. Assumptions of secondary data used

IDEA v2.1.3 and SuMPO Environmental Label Program Registration Data Ver 1.13 are used.

8. 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/english/regulation/>)

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