



Eaton 5P Tower Gen2 Single Phase UPS

Representative product	Eaton 5P 1550i Tower 1U G2 (5P1550IG2) Product Category: Uninterruptible Power Supply (UPS) with energy storage system				
Description of the product	Eaton 5P tower Gen2 UPS is a compact footprint for users who needs continuous power supply like in clinics, hospitals, financial institutions, businesses or IT installations. Eaton 5P tower Gen2 is available in different power ratings : 1550VA, 1150VA, 850VA and 650VA with input voltage from 200V to 240V and inbuilt lead acid battery.				
Product specifications	Power VA & W: 1550VA (1350W) UPS Configuration: Single phase, operating in normal mode. UPS performance classification: UPS - VI (Line Interactive) Technology of the energy storage system: Valve regulated lead acid batteries (VRLA) Product dimensions (H X W X D): 233 x 150 x 445 mm Mass of the equipment : 15.1 kg Power factor: 0.871 Reference service life (Years): 8				
Homogeneous Environmental Families Covered	The PEP concerns product offerings from Eaton 5P Tower G2 series as mentioned below:				
	Product family	Model	Description	UPS Rating (W)	Backup time at full load (mins)
	Eaton 5P G2 tower 1 phase UPS	5P1550IG2 (Reference)	Eaton 5P 1550i G2	1350	2
		5P650IG2	Eaton 5P 650i G2	520	1.1
		5P850IG2	Eaton 5P 850i G2	680	3.9
5P1150IG2		Eaton 5P 1150i G2	920	3.1	
Functional unit	To ensure the supply of power without interruption to equipment with load of 100 watts for a RSL of 1 years, including a backup time capacity of 5 minutes during power shortages				

Declared unit	To ensure the supply of power without interruption to equipment with load of 1350 watts for a RSL of 8 years, including a backup time capacity of 2 minutes (at full load condition) during power shortages
Company information	Eaton Industries France SAS; Email: productstewardship-es@eaton.com

Constituent Materials of			
Reference Product:	1.81E+01 kg (with packaging)		
Materials	Category PEP Material	Mass (kg)	Percentage (%)
Others	Lead acid battery	7.50E+00	41.5%
Others	Electronics	4.56E+00	25.2%
Plastics	ABS	1.84E+00	10.2%
Others	Wood	1.50E+00	8.3%
Others	Cardboard	1.15E+00	6.4%
Others	Cable	6.81E-01	3.8%
Others	Printed wire board	1.97E-01	1.1%
Metals	Steel	1.66E-01	0.9%
Plastics	PELD Film	1.52E-01	0.8%
Others	Polyurethane	6.65E-02	0.4%
Plastics	Polyvinyl Chloride	6.00E-02	0.3%
Others	Paper	5.83E-02	0.3%
Plastics	Polybutylene terephthalate	4.55E-02	0.3%
Plastics	Polypropylene	4.37E-02	0.2%
Plastics	Polyamide	2.45E-02	0.1%
Others	Miscellaneous	2.47E-02	0.1%
Total		1.81E+01	100.0%

Substance Assessment	
The representative product is compliant with the EU-RoHS Directive (2011/65/EU) by application of exemptions and the product contains lead (Pb) in batteries, copper alloy and electronics, which is listed as Substance-of-Very-High-Concern (SVHC) on the Candidate List of the EU-REACH Regulation (1907/2006/EC).	

Additional Environmental Information	
Manufacturing	The reference product is assembled at an Eaton plant (LianZheng Electronic (ShenZhen) Co., Ltd.) holding management system certifications according to ISO 14001 standards.
Distribution	Eaton is committed to minimizing weight and volume of product and its associated packaging material with focus to optimize transport efficiency.
Installation	During installation of the product only standard tools are needed, which do not require any additional energy source and no waste other than the obsolete product packaging is generated during this step.
Use	Product consumes energy during useful life which is considered to be 8 years (as per actual designed life). During the reference service life of product, product doesn't require any maintenance except single replacement of the battery.
End of life	The recyclability rate of the overall product is 51.3% if properly dismantled prior to further processing at a recycling facility. The rate is calculated based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental Impacts															
The calculation of the environmental impacts is the result of the Product's Life Cycle Analysis in accordance with ISO 14040/44, covering the entire lifecycle, i.e., "Cradle-to-Grave" including the following life cycle phases: production, distribution, installation, use and end of life. System modelling was carried out using the commercial LCA software EIME v6.1.3 with database version CODDE-2023-02. Indicators Set used: PEF EF 3.0 (Compliance: PEP ed.4, EN15804+A2) v2.0															
Manufacturing Phase		Product is assembled and prepared for shipment at the Eaton facility (Lianzheng Electronic (Shenzhen) Co., Ltd.) Upstream transportation of the product from manufacturing plant location to the Eaton warehouse location in Rheinbach is considered in the manufacturing stage. Energy model used: China & Europe													
Distribution Phase		Customer location is assumed to be Europe. Intracontinental transport of 775 km by lorry is considered as transport scenario from Eaton location to end user for this study based on actual data.													
Installation Phase		Product is installed in any European country. Hence, packaging waste treatment is considered in this phase considering country specific statistics as per PSR. Energy model used: Europe													
Use Phase		Reference lifetime: 8 years Energy model used: Europe. Usage profile: It has an average energy efficiency of 98.01 %. The methodology for the calculation of the electricity consumption is based on Uninterruptible Power Supplies (UPS) PSR.													
		<table><tr><td>Operating loads</td><td>25%</td><td>50%</td><td>75%</td><td>100%</td></tr><tr><td>Proportion of Time spent at</td><td>0.00</td><td>0.30</td><td>0.40</td><td>0.30</td></tr></table>				Operating loads	25%	50%	75%	100%	Proportion of Time spent at	0.00	0.30	0.40	0.30
		Operating loads	25%	50%	75%	100%									
Proportion of Time spent at	0.00	0.30	0.40	0.30											
Total energy losses are calculated to be equal to 1.37 MWh over the 8 years. Product requires one battery replacement during its use life															
End of life Phase		Product disposed according to European WEEE guidelines. Energy model used: Europe													
Module-D		Module D is calculated according to PCR-ed4-EN-2021 09 06 based on the materials recycled and the modelled end-of-life scenario. It expresses the net benefits and loads beyond the boundaries of the system and are not to be included in the life cycle totals.													

All environmental impacts are calculated for the declared unit, then data should be divided by the Factor calculated with below formulas to get functional unit result.

Factor for use stage energy consumption B6:

$$\frac{\text{Declared Unit Power (1350 W)} * \text{Declared Unit Lifetime (8 year)}}{100 \text{ W} * 1 \text{ year}} = 108$$

Factor for all other stages (excepted B6 of use stage):

$$\frac{\text{Declared Unit Power (1350 W)} * \text{Declared Unit Lifetime (8 year)} * \text{Declared Unit Backuptime (2 min)}}{100 \text{ W} * 1 \text{ year} * 5 \text{ min}} = 43.2$$

Environmental Impact for Functional Unit

Environmental Impact Indicators: Mandatory

Mandatory environmental impact indicators	Units	Sum	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B6)*	End of Life (C1-C4)	Maintenance (B2)	Energy use (B6)	Module D
Resource use, minerals and metals	kg SB eq.	1.84E-03	1.08E-03	1.56E-09	-4.14E-10	7.64E-04	7.55E-07	7.64E-04	3.77E-07	-1.32E-03
Resource use, fossils	MJ	2.13E+02	5.17E+01	5.52E-01	3.44E-01	1.54E+02	6.17E+00	2.18E+01	1.33E+02	-2.01E+01
Acidification	mole of H+ eq.	7.13E-02	2.84E-02	2.51E-04	1.17E-04	4.04E-02	2.18E-03	1.07E-02	2.97E-02	-9.26E-03
Eutrophication, freshwater	kg P eq.	6.62E-05	7.03E-06	1.48E-08	4.34E-07	3.29E-05	2.59E-05	1.86E-05	1.42E-05	-5.43E-06
Eutrophication marine	kg N eq.	9.78E-03	3.64E-03	1.18E-04	4.94E-05	5.53E-03	4.49E-04	2.16E-03	3.37E-03	-1.22E-03
Eutrophication, terrestrial	mol N eq.	1.20E-01	3.94E-02	1.29E-03	4.14E-04	7.52E-02	3.20E-03	2.45E-02	5.07E-02	-1.30E-02
Climate change	kg CO ₂ eq.	9.97E+00	2.88E+00	3.96E-02	7.64E-02	6.66E+00	3.17E-01	1.46E+00	5.20E+00	-9.48E-01
Climate change-Biogenic	kg CO ₂ eq.	5.66E-02	8.49E-03	0.00E+00	3.90E-02	6.89E-03	2.22E-03	-5.17E-05	6.94E-03	-6.34E-03
Climate change-Fossil	kg CO ₂ eq.	9.91E+00	2.87E+00	3.96E-02	3.74E-02	6.65E+00	3.14E-01	1.46E+00	5.20E+00	-9.41E-01
Climate change-Land use and land use change	kg CO ₂ eq.	4.81E-08	3.25E-08	0.00E+00	-1.60E-10	0.00E+00	1.57E-08	0.00E+00	0.00E+00	-2.35E-08
Ozone depletion	kg CFC-11 eq.	1.27E-06	4.96E-07	6.07E-11	4.92E-10	7.13E-07	5.57E-08	6.91E-07	2.22E-08	-2.60E-07
Photochemical ozone formation - human health	kg NMVOC eq.	3.41E-02	1.30E-02	3.25E-04	9.58E-05	1.96E-02	1.12E-03	8.77E-03	1.08E-02	-4.26E-03
Water use	m ³ eq.	4.26E+00	9.09E-01	1.50E-04	1.04E-02	4.43E-01	2.90E+00	2.59E-01	1.84E-01	-4.39E-01

*Note: B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

Inventory Flow Indicators: Mandatory

Mandatory inventory flow indicators	Units	Sum	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B6)*	End of Life (C1-C4)	Maintenance (B2)	Energy use (B6)	Module D
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.62E+01	4.39E-01	7.37E-04	2.00E-01	2.55E+01	8.44E-02	2.41E-02	2.55E+01	1.26E-01
Use of renewable primary energy resources used as raw material	MJ	1.20E+00	1.20E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.24E-01
Total use of renewable primary energy resources	MJ	2.74E+01	1.64E+00	7.37E-04	2.00E-01	2.55E+01	8.44E-02	2.41E-02	2.55E+01	-4.98E-01
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2.09E+02	4.83E+01	5.52E-01	3.44E-01	1.54E+02	6.17E+00	2.15E+01	1.33E+02	-1.78E+01
Use of non renewable primary energy resources used as raw material	MJ	3.63E+00	3.34E+00	0.00E+00	0.00E+00	2.95E-01	0.00E+00	2.95E-01	0.00E+00	-2.22E+00
Total use of non-renewable primary energy resources	MJ	2.13E+02	5.17E+01	5.52E-01	3.44E-01	1.54E+02	6.17E+00	2.18E+01	1.33E+02	-2.01E+01
Use of secondary material	kg	2.27E-06	2.27E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net use of freshwater	m ³	1.07E-01	2.12E-02	3.50E-06	2.42E-04	1.03E-02	7.58E-02	6.02E-03	4.29E-03	-1.02E-02
Components for reuse	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	6.59E-02	1.34E-06	0.00E+00	1.27E-02	0.00E+00	5.31E-02	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	1.35E-03	1.61E-04	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00
Exported Energy	MJ	8.02E-02	1.11E-04	0.00E+00	0.00E+00	7.04E-02	9.67E-03	7.04E-02	0.00E+00	0.00E+00

Mandatory inventory flow indicators	Units	Sum	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B6)*	End of Life (C1-C4)	Maintenance (B2)	Energy use (B6)	Module D
Hazardous waste disposed	kg	2.63E+00	1.37E+00	0.00E+00	7.02E-04	4.86E-01	7.78E-01	3.89E-01	9.72E-02	-5.34E-01
Non hazardous waste disposed	kg	2.27E+00	1.09E+00	1.39E-03	3.99E-02	9.95E-01	1.45E-01	2.47E-01	7.49E-01	-6.42E-01
Radioactive waste disposed	kg	6.25E-04	2.28E-04	9.90E-07	2.59E-06	3.11E-04	8.19E-05	1.54E-04	1.57E-04	-8.25E-05
Biogenic carbon content of the product	kg C	5.10E-04	5.10E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the associated packaging	kg C	2.12E-02	2.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

***Note:** B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

Environmental Impact Indicators: Optional

Optional environmental impact indicators	Units	Sum	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B6)*	End of Life (C1-C4)	Maintenance (B2)	Energy use (B6)	Module D
Ecotoxicity, freshwater	CTUe	1.88E+02	8.02E+01	2.67E-02	3.78E-01	9.02E+01	1.68E+01	3.42E+01	5.60E+01	-5.67E+01
Human toxicity, cancer	CTUh-c	3.59E-07	8.62E-08	6.96E-13	3.22E-09	1.37E-07	1.33E-07	1.36E-07	6.07E-10	-8.88E-08
Human toxicity, non-cancer	CTUh-nc	1.80E-06	9.18E-07	7.53E-11	1.86E-10	8.71E-07	6.68E-09	8.47E-07	2.41E-08	-1.42E-06
Ionising radiation, human health	kBq U235 eq.	8.91E+01	8.03E+01	9.64E-05	4.99E-03	7.81E+00	1.05E+00	7.43E-02	7.74E+00	-1.07E+00
Land use	--	2.38E-01	3.75E-03	0.00E+00	1.63E-02	1.04E-01	1.14E-01	0.00E+00	1.04E-01	-4.06E-04
EF-particulate Matter	Disease occurrence	4.52E-07	1.54E-07	2.04E-09	7.85E-10	2.83E-07	1.22E-08	5.24E-08	2.30E-07	-5.06E-08
Total Primary Energy	MJ	2.41E+02	5.33E+01	5.53E-01	5.44E-01	1.80E+02	6.25E+00	2.19E+01	1.58E+02	-2.06E+01

***Note:** B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

Environmental Impact considering for Declared Unit

Environmental Impact Indicators: Mandatory

Mandatory environmental impact indicators	Units	Sum	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B6)*	End of Life (C1-C4)	Maintenance (B2)	Energy use (B6)	Module D
Resource use, minerals and metals	kg SB eq.	7.96E-02	4.65E-02	6.73E-08	-1.79E-08	3.30E-02	3.26E-05	3.30E-02	4.07E-05	-5.68E-02
Resource use, fossils	MJ	1.78E+04	2.23E+03	2.39E+01	1.49E+01	1.53E+04	2.66E+02	9.43E+02	1.43E+04	-8.67E+02
Acidification	mole of H+ eq.	5.01E+00	1.23E+00	1.08E-02	5.06E-03	3.67E+00	9.44E-02	4.61E-01	3.21E+00	-4.00E-01
Eutrophication, freshwater	kg P eq.	3.78E-03	3.04E-04	6.41E-07	1.87E-05	2.34E-03	1.12E-03	8.04E-04	1.54E-03	-2.34E-04
Eutrophication marine	kg N eq.	6.41E-01	1.57E-01	5.08E-03	2.14E-03	4.58E-01	1.94E-02	9.33E-02	3.64E-01	-5.25E-02
Eutrophication, terrestrial	mol N eq.	8.45E+00	1.70E+00	5.57E-02	1.79E-02	6.53E+00	1.38E-01	1.06E+00	5.47E+00	-5.61E-01
Climate change	kg CO ₂ eq.	7.68E+02	1.24E+02	1.71E+00	3.30E+00	6.25E+02	1.37E+01	6.30E+01	5.62E+02	-4.09E+01
Climate change-Biogenic	kg CO ₂ eq.	2.90E+00	3.67E-01	0.00E+00	1.69E+00	7.47E-01	9.58E-02	-2.23E-03	7.50E-01	-2.74E-01
Climate change-Fossil	kg CO ₂ eq.	7.65E+02	1.24E+02	1.71E+00	1.61E+00	6.24E+02	1.36E+01	6.30E+01	5.61E+02	-4.07E+01
Climate change-Land use and land use change	kg CO ₂ eq.	2.08E-06	1.40E-06	0.00E+00	-6.93E-09	0.00E+00	6.80E-07	0.00E+00	0.00E+00	-1.02E-06
Ozone depletion	kg CFC-11 eq.	5.61E-05	2.14E-05	2.62E-09	2.13E-08	3.22E-05	2.41E-06	2.98E-05	2.40E-06	-1.12E-05
Photochemical ozone formation - human health	kg NMVOC eq.	2.18E+00	5.62E-01	1.40E-02	4.14E-03	1.55E+00	4.84E-02	3.79E-01	1.17E+00	-1.84E-01
Water use	m ³ eq.	1.96E+02	3.93E+01	6.49E-03	4.50E-01	3.11E+01	1.25E+02	1.12E+01	1.99E+01	-1.90E+01

*Note: B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

Inventory Flow Indicators: Mandatory

Mandatory inventory flow indicators	Units	Sum	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B6)*	End of Life (C1-C4)	Maintenance (B2)	Energy use (B6)	Module D
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.78E+03	1.90E+01	3.18E-02	8.64E+00	2.75E+03	3.65E+00	1.04E+00	2.75E+03	5.45E+00
Use of renewable primary energy resources used as raw material	MJ	5.19E+01	5.19E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.70E+01
Total use of renewable primary energy resources	MJ	2.83E+03	7.08E+01	3.18E-02	8.64E+00	2.75E+03	3.65E+00	1.04E+00	2.75E+03	-2.15E+01
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.76E+04	2.09E+03	2.39E+01	1.49E+01	1.52E+04	2.66E+02	9.31E+02	1.43E+04	-7.71E+02
Use of non renewable primary energy resources used as raw material	MJ	1.57E+02	1.44E+02	0.00E+00	0.00E+00	1.28E+01	0.00E+00	1.28E+01	0.00E+00	-9.59E+01
Total use of non-renewable primary energy resources	MJ	1.78E+04	2.23E+03	2.39E+01	1.49E+01	1.53E+04	2.66E+02	9.43E+02	1.43E+04	-8.67E+02
Use of secondary material	kg	9.79E-05	9.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net use of freshwater	m ³	4.92E+00	9.14E-01	1.51E-04	1.05E-02	7.23E-01	3.27E+00	2.60E-01	4.63E-01	-4.42E-01
Components for reuse	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	2.85E+00	5.81E-05	0.00E+00	5.50E-01	0.00E+00	2.30E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	5.83E-02	6.96E-03	0.00E+00	0.00E+00	0.00E+00	5.14E-02	0.00E+00	0.00E+00	0.00E+00
Exported Energy	MJ	3.46E+00	4.79E-03	0.00E+00	0.00E+00	3.04E+00	4.18E-01	3.04E+00	0.00E+00	0.00E+00

Hazardous waste disposed	kg	1.20E+02	5.90E+01	0.00E+00	3.03E-02	2.73E+01	3.36E+01	1.68E+01	1.05E+01	-2.31E+01
Non hazardous waste disposed	kg	1.47E+02	4.71E+01	6.00E-02	1.72E+00	9.15E+01	6.28E+00	1.07E+01	8.08E+01	-2.77E+01
Radioactive waste disposed	kg	3.71E-02	9.87E-03	4.28E-05	1.12E-04	2.36E-02	3.54E-03	6.65E-03	1.69E-02	-3.56E-03
Biogenic carbon content of the product	kg C	2.20E-02	2.20E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the associated packaging	kg C	9.16E-01	9.16E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

***Note:** B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

Environmental Impact Indicators: Optional

Optional environmental impact indicators	Units	Sum	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B6)*	End of Life (C1-C4)	Maintenance (B2)	Energy use (B6)	Module D
Ecotoxicity, freshwater	CTUe	1.17E+04	3.47E+03	1.15E+00	1.63E+01	7.53E+03	7.25E+02	1.48E+03	6.05E+03	-2.45E+03
Human toxicity, cancer	CTUh-c	1.55E-05	3.72E-06	3.01E-11	1.39E-07	5.94E-06	5.74E-06	5.88E-06	6.55E-08	-3.84E-06
Human toxicity, non-cancer	CTUh-nc	7.91E-05	3.97E-05	3.25E-09	8.02E-09	3.92E-05	2.89E-07	3.66E-05	2.60E-06	-6.12E-05
Ionising radiation, human health	kBq U235 eq.	4.35E+03	3.47E+03	4.17E-03	2.16E-01	8.39E+02	4.52E+01	3.21E+00	8.36E+02	-4.64E+01
Land use	--	1.70E+01	1.62E-01	0.00E+00	7.04E-01	1.12E+01	4.94E+00	0.00E+00	1.12E+01	-1.75E-02
EF-particulate Matter	Disease occurrence	3.45E-05	6.67E-06	8.81E-08	3.39E-08	2.71E-05	5.27E-07	2.27E-06	2.49E-05	-2.19E-06
Total Primary Energy	MJ	2.06E+04	2.30E+03	2.39E+01	2.35E+01	1.80E+04	2.70E+02	9.44E+02	1.71E+04	-8.88E+02

***Note:** B2 (Maintenance) and B6 (energy requirements during the use stage) are considered. Other sub modules in the use stage (B1, B3-B5, B7) are equal to zero. So, it is not listed in the result tables.

Other Products covered in homogeneous family of Eaton 5P 1550i Rack 1U G2 and the relevant data are shown in the below table:

Product family	Model	Description	UPS Rating (VA)	Power factor (pf)	UPS Rating (W)	Backup time at full load (mins)	UPS efficiency [%]	Use phase losses (kWh)	Product Net weight (Actual) kg	Packaging weight (Actual) kg
Eaton 5P Tower Gen2	5P1550IG2 (Reference)	Eaton 5P 1550i G2	1550	0.87	1350	2	98.01	1371	15.57	3.21
	5P650IG2	Eaton 5P 650i G2	650	0.8	520	1.1	96.00	1039	8.37	2.81
	5P850IG2	Eaton 5P 850i G2	850	0.8	680	3.9	97.42	874	10.67	3.11
	5P1150IG2	Eaton 5P 1150i G2	1150	0.8	920	3.1	97.93	966	11.47	3.11

To evaluate the environmental impact of other product covered by this PEP, apply the following conversion factors to the Environmental Impact shown above. The extrapolation factors are calculated based on the PSR 10 section 3.6.:

Conversion Factors for Manufacturing, Distribution, Installation, Use and End-of-Life Phase for all environmental impacts for declared unit impacts:

Product Number	Manufacturing	Distribution	Installation	Use B2	Use B6	End of Life
5P1550IG2 (Reference-Declared Unit)	1.00	1.00	1.00	1.00	1.00	1.00
5P650IG2	0.60	0.60	0.88	0.60	0.76	0.54
5P850IG2	0.73	0.73	0.97	0.73	0.64	0.69
5P1150IG2	0.78	0.78	0.97	0.78	0.70	0.74

To get functional unit impacts, the declared unit results of specific part numbers need to be divided by below factors calculated as per PSR10 section 3.1.3:

Part No.	FU factor for Use B6	FU factor for other phases (Excluding B6)
5P15550G2	108	43.2
5P650IG2	41.6	9.152
5P850IG2	54.4	42.432
5P1150IG2	73.6	45.632

Note: Since the reference product operates at different load conditions, below table indicates the typical operating power and their respective back up time

Product Catalog Number	Typical operating power (W)	Backup time at typical load (min)
5P650IG2	400	3
5P850IG2	600	5
5P1150IG2	800	4
5P1550IG2	1000	5

Disclaimer

This Product Environmental Profile and its content is based on information available to us. It refers to the product at the date of issue. We make no express or implied representations or warranties with respect to the information contained herein.

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Verifier accreditation Number	VH54	Supplemented by	PSR-0010-ed2-EN-2023 12 08
Date of issue	04-2024	Information and reference documents	www.pep-ecopassport.org
		Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025: 2006			
Internal	X	External	
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)			
PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019			
The components of the present PEP may not be compared with components from any other program.			
Document complies with ISO 14025: 2006 « Environmental labels and declarations. Type III environmental declarations »			