Product Environmental Profile

ISO 14025 COMPLIANT

NETYS RT

Single-phase UPS rack/tower from 5 to 10 kVA

Socomec is member of :

ecosystem

Member of WEEE Europe

THE GLOBAL COMPACT

Gimélec

Environment and sustainable development commisions

PEP ecopass PORT®

The commitments of Socomec to respect the environment

As part of its environmental policy, Socomec is committed to:

- Incorporate the principles of the circular economy into the design of new products and services
- Promote longer product lifetimes
- Promote the use of environmentally responsible materials
- Design and develop solutions to further improve the energy efficiency of our products and services
- Inform our customers in a transparent manner about the environmental impact of our products throughout their life cycle.

To this end, Socomec is committed to constantly monitoring, anticipating and complying with environmental regulations as well as customer expectations relating to its products, and to ensuring that all those involved adhere to and take responsibility for its commitments.

PEP ecopassport® Registration number: SOCO-00127-V01.01-EN

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Innovative Power Solutions

PRODUCT ENVIRONMENTAL PROFILE

● Product information :

Reference product	
Model	NETYS RT4 10 KVA 230V X/1 LB
Sales reference	NRT4-U110LB
Description	NETYS RT is the fourth generation of single-phase rack-tower UPS
General data	
UPS Configuration	Single
UPS topology	Double conversion
UPS Performance classification	VFI-SS-11
Number of phases available	Three phase
Power [W]	10000
Apparent power [VA]	10000
Acoustic noise [dB]	<55dB
Efficiency	
Weighted UPS efficiency [%]	94,73%
Weight & dimensions	
Dimensions W*H*D [mm]	438 x 86,3 x 570
Mass without packaging [kg]	17,62
Mass of the packaging [kg]	5,38

The UPS is not equipped with an energy storage system.

Functional unit :

To ensure the supply of power to remain within specified characteristics to equipment with load of 100 watts for a RSL of 1 years.

Declared unit :

To ensure the supply of power to remain within specified characteristics to equipment with load of 10000 watts for a RSL of 10 years.

Mathematic relation between DU (declared unit) and FU (functional unit) mentionned in PSR-0010-ed2.0-EN 2023 12 08

References covered by this PEP with extrapolation rules:

- NETYS RT4 with sales references: NRT4-U110LBNRT4-U050; NRT4-U060; NRT4-U060LB; NRT4-U080; NRT4-U108; NRT4-U100; NRT4-U100LB; NRT4-U110; NRT4-U050-C; NRT4-U050-ES; NRT4-U060-C; NRT4-U060-ES; NRT4-U060LB-C; NRT4-U080-C; NRT4-U080-ES; NRT4-U108-C; NRT4-U108-ES; NRT4-U100-C; NRT4-U100-ES; NRT4-U100LB-C; NRT4-U110-C; NRT4-U110-ES; NRT4-U110LB-C

Characteristics of the covered references:

Model	Power [W]	Weighted UPS efficiency [%]	Product mass [kg]	Packaging mass [kg]
Declared Unit: NRT4-U110LB	10000	94,73%	17,62	5,38
Extrapolated unit: NRT4-U050	5000	94,96%	11,82	5,38
Extrapolated unit: NRT4-U060	6000	95,19%	11,82	5,38
Extrapolated unit: NRT4-U060LB	6000	95,19%	15,22	5,38
Extrapolated unit: NRT4-U080	8500	95,22%	13,32	5,38
Extrapolated unit: NRT4-U108	8500	95,27%	14,02	5,38
Extrapolated unit: NRT4-U100	10000	95,06%	13,42	5,38
Extrapolated unit: NRT4-U100LB	10000	95,06%	15,22	5,38
Extrapolated unit: NRT4-U110	10000	94,73%	14,12	5,38
Extrapolated unit: NRT4-U050-C	5000	94,96%	15,22	5,38

Extrapolated unit: NRT4-U050-ES	5000	94,96%	15,22	5,38
Extrapolated unit: NRT4-U060-C	6000	95,19%	11,82	5,38
Extrapolated unit: NRT4-U060-ES	6000	95,19%	15,22	5,38
Extrapolated unit: NRT4-U060LB-C	6000	95,19%	15,22	5,38
Extrapolated unit: NRT4-U080-C	8500	95,22%	15,22	5,38
Extrapolated unit: NRT4-U080-ES	8500	95,22%	15,22	5,38
Extrapolated unit: NRT4-U108-C	8500	95,27%	15,22	5,38
Extrapolated unit: NRT4-U108-ES	8500	95,27%	15,22	5,38
Extrapolated unit: NRT4-U100-C	10000	95,06%	13,42	5,38
Extrapolated unit: NRT4-U100-ES	10000	95,06%	15,22	5,38
Extrapolated unit: NRT4-U100LB-C	10000	95,06%	15,22	5,38
Extrapolated unit: NRT4-U110-C	10000	94,73%	15,22	5,38
Extrapolated unit: NRT4-U110-ES	10000	94,73%	15,22	5,38
Extrapolated unit: NRT4-U110LB-C	10000	94,73%	15,22	5,38

● Materials and substances

Declaration of the constitutives materials

Total mass of the NETYS RT4 10 KVA 230V X/1 LB (including packaging): 23 kg among which packaging: 5,38 kg

For the reference product:

Plastics as % of weight		Metals as % of weight		Other as % of weight	
PET	3,41%	Steel	24,44%	Electronic components	33,88%
PVC	3,15%	Stainless steel	6,12%	Wood	9,80%
Polyamide	0,97%	Copper and its alloys	5,73%	Cardboard	9,69%
Polyester	0,34%	Aluminium and its alloys	0,33%	Miscellanous	<0,1%
ABS	<0,1%	Other ferrous alloys	0,13%	Other inorganics	<0,1%
PE	<0,1%	Tin and its alloys	<0,1%	Paper	<0,1%
		Zinc and its alloys	<0,1%		
		Precious metals	<0,1%		
Other plastics	1,58%				
Total Plastics: 2,21 kg	**9,62%**	**Total Metals: 8,48 kg**	**36,88%**	**Total Others: 12,3 kg**	**53,49%**

Please note that the material balance provided in this document applies to one specific product only. Minor variations may exist between products, information regarding other products can be provided upon request.

Substances management

Socomec is leading a program to limit the use of hazardous substances in the design of new products and to monitor the presence of substances of concern in its supplies to anticipate future use restrictions.

Directive 2011/65/EU : Product references covered by this PEP meet the requirements of the RoHS Directive on the restriction of substances such as lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB), polybrominated diphenyl ethers (PBDEs) and phthalates (DIBP, DEHP, BBP, DBP).

REACH 1907/2006 regulation: To the best of our knowledge, based on the supplier declarations, at the publication date of this document, the product do not contain any other SVHC in a concentration above 0,1% per weight.

● Manufacturing

The products covered by this PEP are manufactured on a production site in China a site where impacts on the environment are reduced by optimizing its energy consumption and by practicing a rigorous waste management. Moreover, Socomec is committed to the progressive ISO 14001 certification of its manufacturing sites.

● Distribution

As part of its distribution policy aiming to respect the environment, Socomec is in favor of groupage transports and ISO 14001 certified logistic partners.

No reconditionning is planned for the product. This phase is consequently neglected.
The sizing of the packaging has been optimized to ensure the best possible protection of the product at the lowest possible volume in order to reduce the impact of the transport stage on the environment.

● Installation

The installation phase consists in connecting the product to the existing electrical installation.

The installation does not generate any significant impacts on the environment, except impacts from packaging waste.

● Use phase

Consumption scenario

Use phase scenario: European energy mix

Load (%)	25%	50%	75%	100%
Proportion of time spent (%)	0%	30%	40%	30%

Total energy consumption during 10 years

Total average energy consumption	35228 kWh
Average UPS efficiency	94,73%

Care and maintenance

The product does not require any maintenance under normal conditions of use.

Consumables

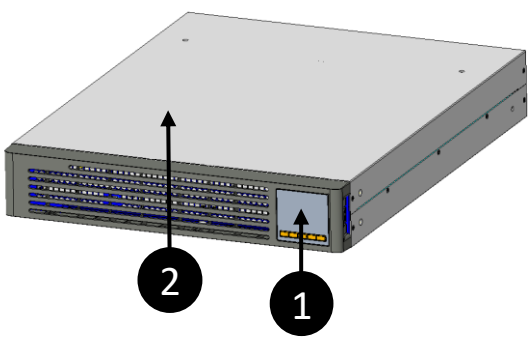
The product does not require consumables.

● End of life

End of life treatment

The following parts require specific care and selective treatment in accordance with Annex VII of the WEEE Directive 2012/19/EU: Waste of electrical and electronic equipment. Maintenance and disassembly should always be conducted by qualified personnel.

Type of component	Item	Part mass	Location
Necessity of a selective treatment	LCD SCREEEN	0,05kg	1
	PCB	7,3kg	2



Recyclability potential of the product according to IEC TR 62635

The recyclability potential of the product is 52,76%.

This covers material and energy recovery potentials.

● Additional information

This environmental declaration lists the information required in Annex A and B of IEC 62040-4 (Edition 1.0 2013-04) and EN 62040-4:2013 (2014-03).

● Environmental impacts

Calculation methodology: life cycle assessment (LCA)

The calculation of the impacts on the environment was made using a life cycle assessment methodology in accordance with the ISO 14040 requirements and with PEP eco passport product category rules.
For more details follow the link:
www.pep-ecopassport.org

This study was carried out with the following version of the software EIME and of the database:

EIME version: EIME V6.2.3

Database version: CODDE-2024-04

For biogenic carbon storage the following methodology was used : 0/0

The whole life cycle has been taken into account:

Step	Geographical representativeness	Scenario
Manufacturing (M) (A1-A3)	Production of electronic components : Asia Production of other components and packaging : Asia Assembly : Asia	From the raw material extraction to the last Socomec logistic platform, including packaging Waste generated during manufacturing phase are taken into account.
Distribution (D) (A4)	Distribution scenario : Europe	From the last Socomec logistic platform to the final customer. No product reconditionning.
Installation (I) (A5)	Transport and treatment of packaging wastes : Local	Local road transport of 1000 km of generated wastes to the treatment site, end of life treatment.
Use phase (U) (B1-B7)	Energy mix : Europe Production of maintenance components: analog to manufacturing phase	Power consumption required during 15 years according to consumption scenario above mentionned.
End of life (EOL) (C1-C4)	Transport and treatment : Local	Road transport of 1000 km from the final customer to the treatment sites. End of life treatment.

Environmental impacts of the NETYS RT4 10 KVA 230V X/1 LB per functional unit (power of 100W and a lifespan of 1 year)

The following impacts have been calculated to best represent geographically, temporally and technologically each step of the life cycle.

Indicators	Unit	Total impact	M (A1-A3)	D (A4)	I (A5)	U (B1-B7)	EOL (C1-C4)
Climate change	kg CO2 eq.	1,27E+01	2,72E-01	7,23E-03	5,41E-03	1,24E+01	1,83E-03
Climate change-Biogenic	kg CO2 eq.	1,86E-02	0*	0*	1,20E-03	2,28E-02	0*
Climate change-Fossil	kg CO2 eq.	1,27E+01	2,77E-01	7,23E-03	4,21E-03	1,24E+01	1,83E-03
Climate change-Land use and land use change	kg CO2 eq.	3,06E-09	3,06E-09	0*	0*	0*	0*
Ozone depletion	kg CFC-11 eq.	9,68E-08	3,65E-08	0*	3,68E-11	6,02E-08	2,71E-11
Acidification	mol H+ eq.	6,62E-02	2,33E-03	2,51E-04	1,05E-05	6,36E-02	9,39E-06
Eutrophication, freshwater	kg P eq.	3,38E-05	7,11E-07	0*	3,48E-08	3,27E-05	3,58E-07
Eutrophication, marine	kg N eq.	8,09E-03	2,70E-04	5,92E-05	4,27E-06	7,75E-03	3,72E-06
Eutrophication, terrestrial	mol N eq.	1,28E-01	2,92E-03	6,49E-04	3,54E-05	1,24E-01	3,92E-05
Photochemical ozone formation - human health	kg NMVOC eq.	2,55E-02	9,71E-04	1,67E-04	8,18E-06	2,44E-02	1,03E-05
Resource use, minerals and metals	kg SB eq.	5,56E-05	5,13E-05	0*	0*	4,39E-06	0*
Resource use, fossils	MJ	3,20E+02	6,60E+00	9,14E-02	0*	3,13E+02	0*
Water use	m3 eq.	1,03E+00	7,40E-02	0*	5,05E-04	9,51E-01	0*
Particulate matter	Disease occurrence	5,27E-07	1,34E-08	1,32E-09	6,52E-11	5,12E-07	6,90E-11
Ionising radiation, human health	kBq U235 eq.	3,27E+01	1,49E+01	0*	0*	1,78E+01	0*
Ecotoxicity, freshwater	CTUe	3,02E+01	6,64E+00	4,32E-03	3,98E-02	2,35E+01	1,27E-02
Human toxicity, cancer	CTUh	8,51E-09	6,66E-09	0*	2,88E-10	1,56E-09	0*
Human toxicity, non-cancer	CTUh	5,45E-08	1,72E-08	0*	1,17E-11	3,73E-08	0*
Land use	No dimension	3,56E-01	1,22E-02	0*	0*	3,44E-01	0*
Renewable primary energy used as energy	MJ	8,31E+01	1,03E-01	0*	1,45E-02	8,29E+01	0*
Renewable primary energy used as raw material	MJ	1,30E-01	1,30E-01	0*	0*	0*	0*
Total renewable primary energy	MJ	8,32E+01	2,33E-01	0*	1,45E-02	8,29E+01	0*
Non renewable primary energy used as energy	MJ	3,20E+02	6,46E+00	9,14E-02	0*	3,13E+02	0*
Non renewable primary energy used as raw material	MJ	1,36E-01	1,36E-01	0*	0*	0*	0*
Total non renewable primary energy	MJ	3,20E+02	6,60E+00	9,14E-02	0*	3,13E+02	0*
Total primary energy	MJ	4,03E+02	6,83E+00	9,15E-02	4,61E-02	3,96E+02	0*
Use of secondary material	kg	1,21E-07	1,21E-07	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Net use of fresh water	m3	2,41E-02	1,72E-03	0*	1,17E-05	2,24E-02	0*
Hazardous waste disposed	kg	9,57E-01	4,13E-01	0*	0*	5,44E-01	0*
Non hazardous waste disposed	kg	2,17E+00	5,02E-02	2,20E-04	3,20E-03	2,10E+00	1,88E-02
Radioactive waste disposed	kg	5,01E-04	1,93E-05	1,53E-07	1,68E-07	4,81E-04	4,42E-07
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for recycling	kg	1,05E-03	0*	0*	1,05E-03	0*	0*
Materials for energy recovery	kg	2,48E-03	0*	0*	2,48E-03	0*	0*
Exported Energy	MJ	8,60E-04	8,60E-04	0*	0*	0*	0*
Biogenic carbon content - Product	kg of C	0,00E+00	0*	0*	0*	0*	0*
Biogenic carbon content - Packaging	kg of C	2,02E-03	2,02E-03	0*	0*	0*	0*

NB : 0 means that this impact either represents less than 0.01% of the total life cycle of the reference flow, or has no impact (in the case where the total impact is zero).*

The aforementionned impacts are declared for the functional unit of the reference product.

The environmental impacts of the reference product per declared unit can be calculated by multiplying the values of the environmental indicators by the factor available in the following table.

Life cycle phase	All life cycle phase
Factor	1000

Registration number : SOCO-00127-V01.01-EN	Drafting Rules : "PEP-PCR-ed4-EN 2021 09 06" Supplemented by : "PSR-0010-ed2.0-EN 2023 12 08"
Verifier accreditation number : VH12	Information and reference documents : www.pep-ecopassport.org
Date of issue: 01-2025	Validity period : 5 years
Independant verification of the declaration and data, in compliance with ISO 14025 : 2006	
Internal : ☑ 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 or 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”	

This document is intended to be only informative and non-contractual and does not create any right or obligation or commitment for Socomec towards its associates, customers or any other person or entity. All the values indicated in this document may change depending on many factors (use conditions, applications, installations, environment…). The life time mentioned in this document is only indicative and is not intended to be the minimal, maximal or average life time of the product.

Other covered references

For the products covered by the PEP other than the reference product, the environmental impacts of each phase of the lifecycle are calculated by multiplying the declared unit impacts values with the following extrapolation factors:

Model	M (A1-A3)	D (A4)	I (A5)	U (B1-B7)	EOL (C1-C4)
NRT4-U110LB	1,00	1,00	1,00	1,00	1,00
NRT4-U050	0,75	0,75	1,00	0,48	0,67
NRT4-U060	0,75	0,75	1,00	0,55	0,67
NRT4-U060LB	0,90	0,90	1,00	0,55	0,86
NRT4-U080	0,81	0,81	1,00	0,77	0,76
NRT4-U108	0,84	0,84	1,00	0,76	0,80
NRT4-U100	0,82	0,82	1,00	0,94	0,76
NRT4-U100LB	0,90	0,90	1,00	0,94	0,86
NRT4-U110	0,85	0,85	1,00	1,00	0,80
NRT4-U050-C	0,90	0,90	1,00	0,48	0,86
NRT4-U050-ES	0,90	0,90	1,00	0,48	0,86
NRT4-U060-C	0,75	0,75	1,00	0,55	0,67
NRT4-U060-ES	0,90	0,90	1,00	0,55	0,86
NRT4-U060LB-C	0,90	0,90	1,00	0,55	0,86
NRT4-U080-C	0,90	0,90	1,00	0,77	0,86
NRT4-U080-ES	0,90	0,90	1,00	0,77	0,86
NRT4-U108-C	0,90	0,90	1,00	0,76	0,86
NRT4-U108-ES	0,90	0,90	1,00	0,76	0,86
NRT4-U100-C	0,82	0,82	1,00	0,94	0,76
NRT4-U100-ES	0,90	0,90	1,00	0,94	0,86
NRT4-U100LB-C	0,90	0,90	1,00	0,94	0,86
NRT4-U110-C	0,90	0,90	1,00	1,00	0,86
NRT4-U110-ES	0,90	0,90	1,00	1,00	0,86
NRT4-U110LB-C	0,90	0,90	1,00	1,00	0,86