Product Environmental Profile

Smart-UPS ≤ 1500 VA

Smart-UPS ≤ 1500 VA Uninterruptible Power Supply (UPS) products protect equipment and critical data from interruptions by supplying reliable, network-grade back up power reliably and efficiently.





General information

Representative product	Smart-UPS ≤ 1500 VA - SMT1000I
Description of the product	Smart-UPS \leq 1500 VA Uninterruptible Power Supply (UPS) products protect equipment and critical data from interruptions by supplying reliable, network-grade back up power reliably and efficiently.
Description of the range	Smart-UPS ≤ 1500 VA Uninterruptible Power Supply (UPS) products products provide, true double- conversion power protection for servers, voice / data networks, medical labs, and light industrial applications. The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.
Functional unit	To protect the load of [800] Watts against input power failure during [5] years and provide a backup time of [6] minutes in case of a power outage

Constituent materials



Substance assessment

Products of this range are designed in conformity with the requirements of the European RoHS Directive 2011/65/EU (RoHS2) and EU Delegated Directive (EU) 2015/863 and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium, flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) or phthalates (Bis(2-ethylhexyl) phthalate - DEHP, Butyl benzyl phthalate (- BBP, Dibutyl phthalate -DBP, Diisobutyl phthalate - DIBP as mentioned in the Directive

The battery pack(s) within this product range are designed to conform with the requirements of the Battery and Accumulator Directive (European Directive 2006/66/EC of 26 September 2006) and do not contain, or only contain in authorized proportions, the regulated substances lead (Pb), mercury (Hg) and cadmium (Cd) as mentioned in the Directive. Additionally, the non-spillable, valve regulated lead acid batteries used in the battery pack(s) within this product range are certified by their manufacturers as capable of withstanding the IATA/ICAO Vibration and Pressure Differential Test and that at a temperature of 55 degrees Centigrade, there is no free electrolyte to flow from a ruptured or cracked case.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website <u>http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page</u>

W Additional environmental information

	The Smart-UPS ≤ 1500 VA presents the following relevent environmental aspects						
Design	Designed at a Schneider Electric Design Center that utilizes a design process that conforms to the requirements of the IEC 62430 "Environmentally Conscious Design for Electrical and Electronic Products" standard.						
manuracturi	Manufactured at a Schneider Electric production site ISO14001 certified						
	Weight and volume of the packaging optimized, based on the European Union's packaging directive						
Distribution	Packaging weight is 3400 g, consisting of cardboard (2.05%), PE film (1.72%) wood (11.25%) and paper (0.33%)						
	Product distribution optimised by setting up local distribution centres						
Installation	Smart-UPS \leq 1500 VA does not require any special installation materials or operations.						
Use	The product does not require special maintenance operations.						
	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials						
	This product contains Batteries lead acid (3940g), cables (478.31g), PCB (470g), ABS FR (50g) that should be separated from the stream of waste so as to optimize end-of-life treatment.						
End of life	The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider-Electric Green Premium website						
	http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page						
	Based on "ECO'DEEE recyclability and recoverability calculation method"Recyclability potential:51%Sep: 2008 presented to the French Agency for Environment and Energy Management: ADEME).						

Q Environmental impacts

Reference life time	5 years							
Product category	Active products							
Installation elements	Transport and disposal of packa components needed.	Transport and disposal of packaging are accounted for during installation. No special installation components needed.						
Use scenario	•	Consumed power is 13,3 W 100 % of the time in Active mode, W 0 % of the time in Standby mode, W 0 % of the time in Sleep mode and W 0 % of the time in Off mode.						
Geographical representativeness	Europe							
Technological representativeness	Smart-UPS ≤ 1500 VA Uninterruptible Power Supply (UPS) products protect equipment and critical data from interruptions by supplying reliable, network-grade back up power reliably and efficiently.							
	Manufacturing	Installation	Use	End of life				
Energy model used	Energy model used: Philippines	ELCD_Electricity_mix_<1k V_EU-27ELCD-0089	ELCD_Electricity_mix_< 1kV_EU-27ELCD- 0089	ELCD_Electricity_mix_ <1kV_EU-27ELCD- 0089				

Compulsory indicators Smart-UPS ≤ 1500 VA - SMT1000I							
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	3,11E-02	3,11E-02	0*	0*	1,57E-05	0*
Contribution to the soil and water acidification	$kg SO_2 eq$	4,22E+00	1,57E+00	2,04E-02	5,42E-03	2,61E+00	1,15E-02
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	3,22E-01	2,13E-01	5,38E-03	1,32E-03	9,79E-02	4,34E-03
Contribution to global warming	$kg CO_2 eq$	6,85E+02	3,18E+02	7,60E+00	2,21E+00	3,45E+02	1,16E+01

Contribution to ozone layer depletion	kg CFC11 eq	1,29E-04	3,99E-05	4,73E-06	1,89E-07	8,39E-05	6,25E-07
Contribution to photochemical oxidation	$kg C_2H_4 eq$	2,31E-01	1,05E-01	6,94E-04	4,18E-04	1,23E-01	1,16E-03
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	4,01E+00	3,07E+00	8,10E-03	2,78E-02	9,01E-01	9,32E-03
Total Primary Energy	MJ	1.20E+04	4,79E+03	9.48E+01	9.27E+01	7.00E+03	5,99E+01



Optional indicators	Smart-UPS ≤ 1500 VA - SMT1000I						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	7,70E+03	3,93E+03	9,65E+01	4,02E+01	3,56E+03	6,98E+01
Contribution to air pollution	m³	6,23E+04	4,66E+04	2,72E+02	1,56E+02	1,48E+04	5,03E+02
Contribution to water pollution	m³	5,26E+04	3,56E+04	1,13E+03	2,85E+02	1,45E+04	1,10E+03
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	3,01E+00	3,00E+00	0*	2,92E-03	0*	0*
Total use of renewable primary energy resources	MJ	6,87E+02	1,34E+02	0*	5,20E+01	5,01E+02	0*
Total use of non-renewable primary energy resources	MJ	1,13E+04	4,65E+03	9,48E+01	4,07E+01	6,50E+03	5,98E+01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	5,65E+02	6,91E+01	0*	0*	5,01E+02	0*
Use of renewable primary energy resources used as raw material	MJ	1,21E+02	6,48E+01	0*	5,66E+01	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1,12E+04	4,51E+03	9,48E+01	2,28E+01	6,50E+03	5,98E+01
Use of non renewable primary energy resources used as raw material	MJ	1,61E+02	1,43E+02	0*	1,79E+01	0*	0*
Use of non renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Waste categories	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	8,85E+01	4,33E+01	0*	1,07E-01	0*	4,51E+01
Non hazardous waste disposed	kg	1,36E+03	5,65E+01	0*	1,19E+01	1,29E+03	7,54E-01
Radioactive waste disposed	kg	1,08E+00	2,60E-02	1,37E-03	6,59E-04	1,05E+00	3,84E-04
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1,24E+01	1,17E+00	0*	0*	0*	1,12E+01

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Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	2,48E+00	2,50E-02	0*	0*	0*	2,45E+00
Exported Energy	MJ	0,00E+00	0*	0*	0*	0*	0*

* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME v5.5, database version 2016-11.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range.

The environmental indicators of other products in this family may be proportional extrapolated based on relationships between an amount of a key parameter of the product as compared to the amount of that key parameter within the reference product. Proportionality rules are based on the following key parameters: Manufacturing phase impacts - total mass of product. Distribution phase impacts - total mass of product (including packaging). Installation phase impacts - mass of packaging. Use phase impacts - life time energy use. End of Life impacts - the product mass (excluding packaging).

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

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Verifier accreditation	VH-08	Supplemented by	PSR-0010-ed1.1-EN-2015 10 16
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		Validity period	6 years
Independent verificatio	n of the declaration and data, in compliance	with ISO 14025 : 2010	
Internal X	External		
The PCR review was o	onducted by a panel of experts chaired by F	hilippe Osset (SOLINNEN)	
The elements of the pr	esent PEP cannot be compared with elemer	nts from another program.	
Document in complian environmental declara	ce with ISO 14025 : 2010 « Environmental la lions »	bels and declarations. Type	III

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