# **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.

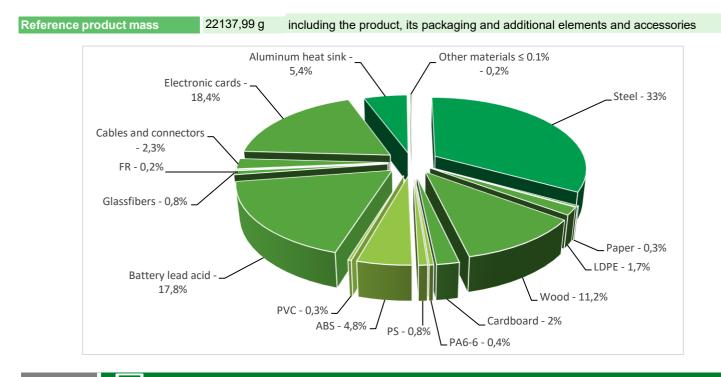




#### General information

Representative product	Smart-UPS ≤ 1500 VA -SMT1000I
Description of the product	Smart-UPS ≤ 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 protect equipment and critical data from interruptions by supplying reliable, network-grade back up power reliably and efficiently.
	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 authorized 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, Disobutyl 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 <a href="http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page">http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page</a>

### Additional environmental information

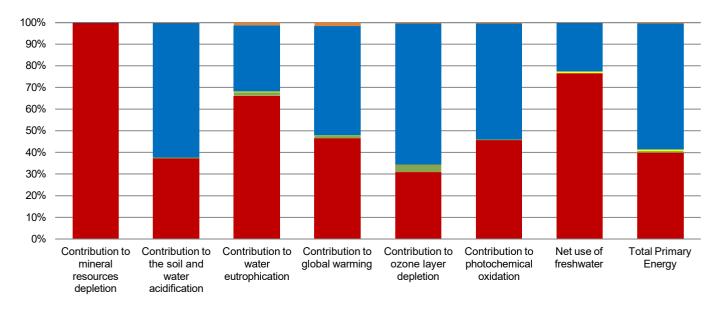
	The Smart-UPS ≤ 1500 VA presents t	ne following relevent environmental aspects				
Design	Designed at a Schneider Electric Design Center that utilizes a design process that conforms to the requirements of the IEC 62430 "Environmentally Conscious Design for Electrical and Electronic Products" standard.					
manutacturi ng	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 cardbo	pard (2.05%), PE film (1.72%) wood (11.25%) and paper (0.33%)				
	Product distribution optimized by setting up local	distribution centers				
Installation	Smart-UPS ≤ 1500 VA does not require any spe	cial 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				
	Recyclability potential: 51% (version	on "ECO'DEEE recyclability and recoverability calculation method" n V1, 20 Sep. 2008 presented to the French Agency for Environment lergy Management: ADEME).				

## *O* 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-27_ELCD-0089	ELCD_Electricity_mix_< 1kV_EU-27_ELCD- 0089	ELCD_Electricity_mix_ <1kV_EU-27_ELCD- 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 PO4 <sup>3-</sup> 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 <sub>2</sub> 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	$kg \ C_2 H_4 \ eq$	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



Manufacturing Distribution Installation Use End of life

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	m <sup>3</sup>	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
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*
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.

Verifier accreditation	N°: VH08	Drafting rules	PCR-ed3-EN-2015 04 02					
		Supplemented by	PSR-0010-ed1.1-EN-2015 10 16					
Date of issue	01/2017	Validity period	5 years					
Independent verificati	Independent verification of the declaration and data, in compliance with ISO 14025: 2010							
Internal X External								
The PCR review was	The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)							
The elements of the present PEP cannot be compared with elements from another program.								
Document in compliance with ISO 14025: 2010 « Environmental labels and declarations. Type III environmental declarations »								

Schneider Electric Industries SAS

Customer Care Center www.schneider-electric.com/contact 35, rue Joseph Monier CS 30323 F- 92506 Rueil Malmaison Cedex RCS Nanterre 954 503 439 Capital social 896 313 776 €