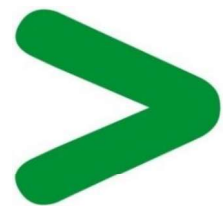


Product Environmental Profile

APC Smart-UPS Li-Ion, Short Depth Uninterruptible Power Supply

500 to 1500 VA rack-mounted UPS with Li-ion batteries

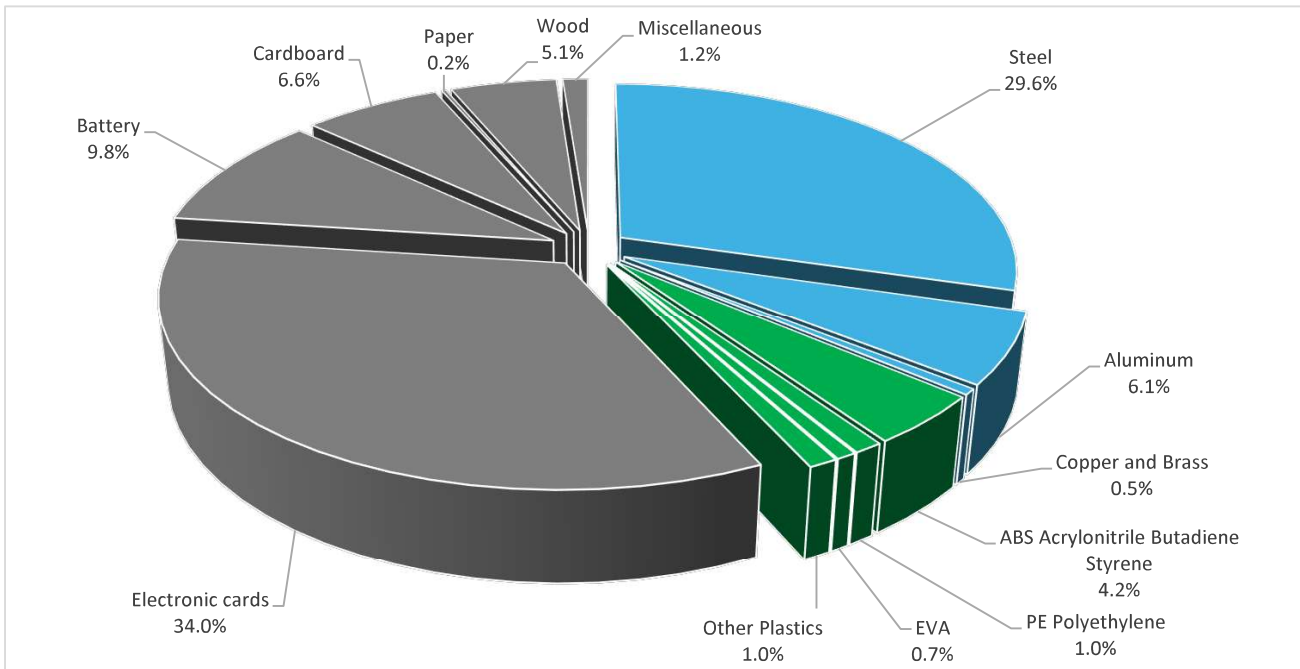


General information

Representative product	APC Smart-UPS Li-Ion, Short Depth 1500VA, 120V with SmartConnector - SMTL1500RM3UC
Description of the product	APC Smart-UPS™ with lithium-ion batteries protects critical data and equipment from power problems by supplying clean and reliable network-grade power. Patented green mode provides high efficiency at all load levels and lithium-ion batteries provide 2X in battery life, better performance at higher temperatures and Total Cost of Ownership savings compared to valve-regulated lead-acid (VRLA) batteries.
Description of the range	500 to 1500 VA rack-mounted UPS with Li-ion batteries 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.
Products covered	SMTL1000RM2UC SMTL1000RM2UCQ SMTL1000RMI2U SMTL1000RMI2UC SMTL1000RMI2UNC SMTL1500RM3UCQ SMTL1500RMI3U SMTL1500RMI3UC SMTL1500RMI3UNC SMTL1K5R3CX180 SMTL750RM2UC SMTL750RM2UCQ SMTL750RMI2U SMTL750RMI2UC SMTL750RMI2UNC SCL500RM1NC SCL500RM1UC SCL500RM1UNC SCL500RMI1U SCL500RMI1UC SCL500RMI1UNC
Functional unit	To protect the load of 1350 Watts against input power failure during 5 years and provide a backup time of 5 minutes in case of a power outage.

Constituent materials

Reference product mass 22680 g including the product, its packaging and additional elements and accessories



Plastics	6.9%
Metals	36.1%
Others	56.8%

Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive," (European Directive 2011/65/EU of 8 June 2011 and EU Directive 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 Directives.

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 lithium ion battery pack contained within this product has been tested in accordance with UN38.3 and a UN38.3.5 Test Summary Report is available.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>

Additional environmental information

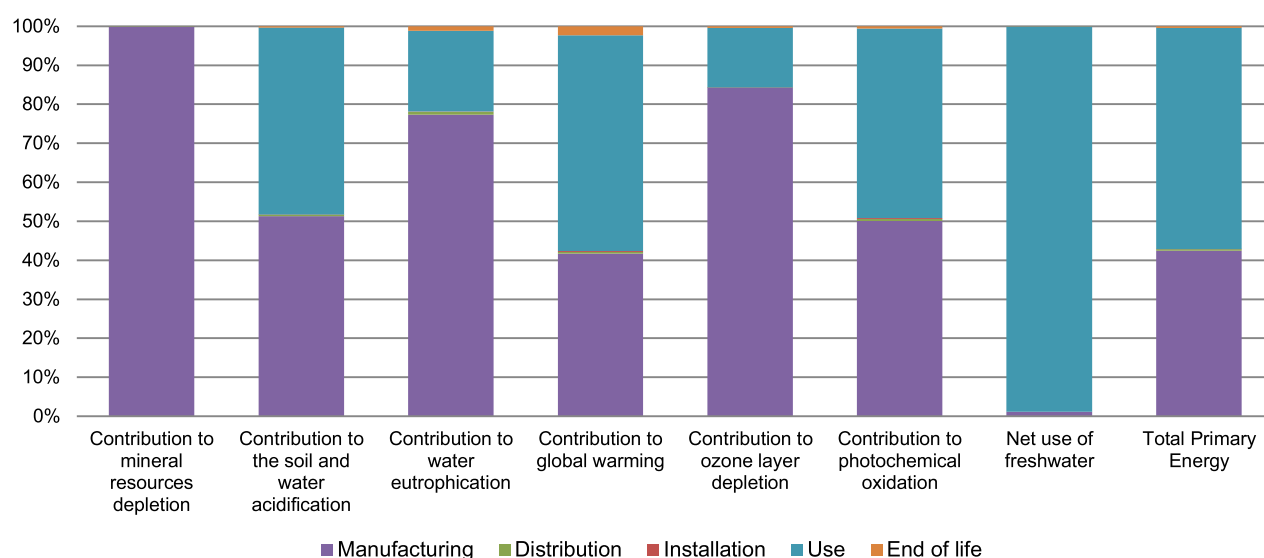
The APC Smart-UPS Li-Ion, Short Depth 1500VA, 120V with SmartConnector presents the following relevant environmental aspects

Design	High-efficiency green mode: Achieves up to 97% percent efficiency, which minimizes utility and cooling costs without compromising performance or reliability.
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 3219.7 g, consisting of cardboard (48%), wood (39%), plastic (12%), paper (1%) Product distribution optimised by setting up local distribution centres
Installation	The SMTL1500RM3UC Smart-UPS Li-Ion does not require any special installation materials or operations.
Use	The product does not require special maintenance operations.
End of life	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials This product contains Li-Ion batteries (2416g), Printed Circuit Boards>10cm2 (1510g), Electrolytic Capacitors (54g), BFR plastics (62g) that should be separated from the stream of waste so as to optimize end-of-life treatment. 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% 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

Reference life time	5 years			
Installation elements	Transport and disposal of packaging are accounted for during installation. No special installation components needed.			
Use scenario	Power consumption conforms to PSR0010 where the product operates at 25% load 0% of the time, 50% load 30% of the time, 75% load 40% of the time and 100% load 30% of the time. The average power consumption wattage is 16.5W			
Geographical representativeness	Europe			
Technological representativeness	The means of material production, processing and transport modeled are representative of the technologies used in production.			
Energy model used	Manufacturing	Installation	Use	End of life
	Energy model used: EU-27, CN, BR, JP, US, SG	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators		APC Smart-UPS Li-Ion, Short Depth 1500VA, 120V with SmartConnector - SMTL1500RM3UC					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	2.60E-02	2.60E-02	0*	0*	3.07E-05	0*
Contribution to the soil and water acidification	kg SO ₂ eq	3.08E+00	1.58E+00	1.34E-02	1.19E-03	1.47E+00	1.14E-02
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	4.30E-01	3.33E-01	3.08E-03	5.72E-04	8.90E-02	4.97E-03
Contribution to global warming	kg CO ₂ eq	6.38E+02	2.66E+02	2.93E+00	1.45E+00	3.54E+02	1.46E+01
Contribution to ozone layer depletion	kg CFC11 eq	1.51E-04	1.27E-04	0*	0*	2.30E-05	6.44E-07
Contribution to photochemical oxidation	kg C ₂ H ₄ eq	1.67E-01	8.34E-02	9.53E-04	3.44E-04	8.10E-02	1.05E-03
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m ³	1.30E+03	1.41E+01	0*	0*	1.28E+03	0*
Total Primary Energy	MJ	1.24E+04	5.29E+03	4.14E+01	2.98E+00	7.06E+03	5.42E+01



Optional indicators		APC Smart-UPS Li-Ion, Short Depth 1500VA, 120V with SmartConnector - SMTL1500RM3UC					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	7.06E+03	2.96E+03	4.11E+01	2.81E+00	4.01E+03	4.24E+01
Contribution to air pollution	m ³	5.19E+04	3.61E+04	1.24E+02	3.89E+01	1.52E+04	4.36E+02
Contribution to water pollution	m ³	5.58E+04	4.00E+04	4.81E+02	3.18E+01	1.46E+04	6.73E+02
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2.79E+00	2.79E+00	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.01E+03	1.13E+02	0*	0*	8.98E+02	0*
Total use of non-renewable primary energy resources	MJ	1.14E+04	5.17E+03	4.13E+01	2.94E+00	6.16E+03	5.42E+01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	9.51E+02	5.34E+01	0*	0*	8.98E+02	0*
Use of renewable primary energy resources used as raw material	MJ	5.96E+01	5.96E+01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.13E+04	5.03E+03	4.13E+01	2.94E+00	6.16E+03	5.42E+01
Use of non renewable primary energy resources used as raw material	MJ	1.47E+02	1.47E+02	0*	0*	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	1.11E+03	1.07E+03	0*	0*	1.84E-01	4.28E+01
Non hazardous waste disposed	kg	1.50E+03	1.81E+02	0*	1.33E+00	1.32E+03	5.08E-01
Radioactive waste disposed	kg	9.81E-01	9.98E-02	0*	0*	8.80E-01	3.61E-04
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.42E+01	1.25E+00	0*	2.04E+00	0*	1.09E+01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	3.65E+00	0*	0*	0*	0*	3.65E+00
Exported Energy	MJ	8.63E-01	8.11E-02	0*	7.82E-01	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.8.1, database version 2018-11 in compliance with ISO14044.

The manufacturing 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 proportionally extrapolated, by life cycle phase, based on the ratio of the amount of a key parameter of the product, over the amount of that key parameter within the reference product. Proportionality rules are based on the following key parameters for impacts by lifecycle phase: Manufacturing phase impacts - mass of the product (excluding packaging). Distribution phase impacts - total mass of product (including packaging). Installation phase impacts - mass of packaging. Use phase impacts - product lifetime energy consumption. 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.

Registration number :		Drafting rules	PCR-ed3-EN-2015 04 02
Verifier accreditation N°	VH08	Supplemented by	PSR-0010-ed1.1-EN-2015 10 16
Date of issue	04/2019	Information and reference documents	
		Validity period	6 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010			
Internal	X	External	
The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)			
PEP are compliant with XP C08-100-1 :2014			
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 »			

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