Product Environmental Profile

Residential Propane Monitor

Tank Level Monitors

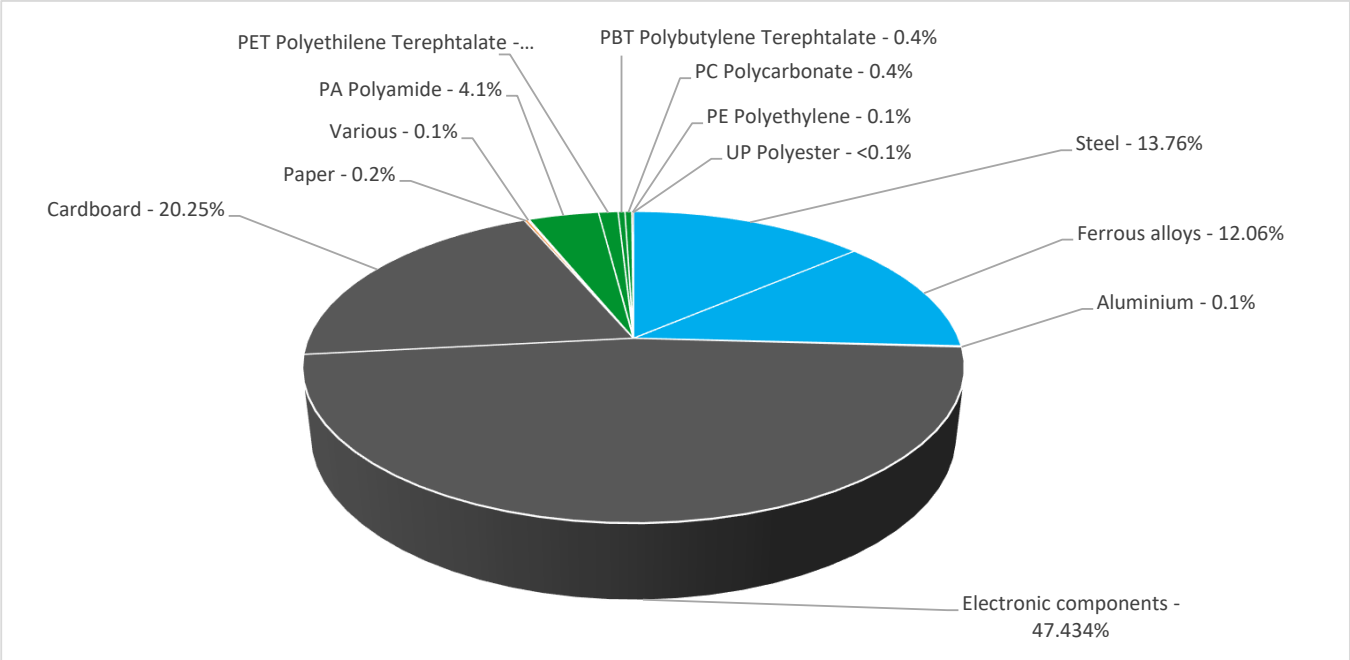
Schneider Electric

General information

Representative product	Residential Propane Monitor - GR05R-Y
Description of the product	Centeron Wireless Tank Monitoring Systems are used to monitor tanks and have maximum control over product distribution, collection, and overall vessel management.
Description of the range	Monitors with hall effect remote ready dial for propane tanks 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	The Centerton System uses state-of-the-art radio, cellular and sensor technology to remotely monitor storage tanks during 10 years lifetime with a maximum power consumption of 0.9 W at 100% use rate.

Constituent materials

Reference product mass	620 g	including the product, its packaging and additional elements and accessories



	Plastics	6.1%
	Metals	25.9%
	Others	68.0%

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 do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive

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

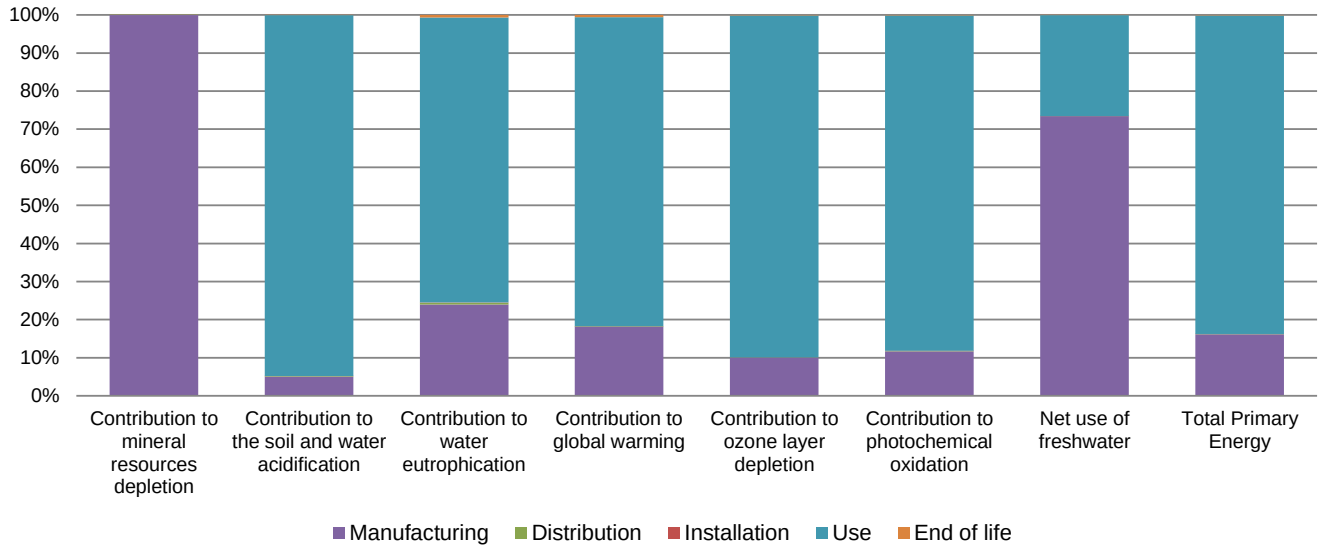
Additional environmental information

The Residential Propane Monitor presents the following relevent environmental aspects	
Manufacturing	Manufactured at a production site complying with the regulations
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 131.5 g, consisting of carton board (94.7%) and PET film (5.3%)
Installation	Installation will vary based on the client's specific situation. It is not expected to involve significant physical operations or materials.
Use	Customer has to procure batteries every 5 years for the replacement.
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 Electronic boards (183.56 g), Cable (40 g) and Batteries (68 g) 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: **41%** 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	10 years			
Product category	Other equipments - Active product			
Installation elements	Transport and end of life of packaging accounted for during installation.			
Use scenario	The product is in active mode 100% of the time with a power use of 0.9 W for 10 years			
Geographical representativeness	Europe, USA			
Technological representativeness	Centeron Wireless Tank Monitoring Systems are used to monitor tanks and have maximum control over product distribution, collection, and overall vessel management.			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: USA	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators	Residential Propane Monitor - GR05R-Y						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	9.32E-03	9.32E-03	0*	0*	2.12E-06	0*
Contribution to the soil and water acidification	kg SO_2 eq	3.71E-01	1.88E-02	3.65E-04	0*	3.52E-01	2.82E-04
Contribution to water eutrophication	kg PO_4^{3-} eq	1.76E-02	4.23E-03	8.41E-05	9.52E-06	1.32E-02	1.22E-04
Contribution to global warming	kg CO_2 eq	5.74E+01	1.04E+01	8.00E-02	7.44E-03	4.65E+01	3.62E-01
Contribution to ozone layer depletion	kg CFC11 eq	1.26E-05	1.26E-06	0*	0*	1.13E-05	1.66E-08
Contribution to photochemical oxidation	kg C_2H_4 eq	1.89E-02	2.20E-03	2.61E-05	2.31E-06	1.66E-02	2.68E-05
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	4.58E-01	3.36E-01	0*	0*	1.21E-01	2.51E-04
Total Primary Energy	MJ	1.13E+03	1.82E+02	1.13E+00	0*	9.43E+02	1.44E+00



Optional indicators		Residential Propane Monitor - GR05R-Y					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	5.91E+02	1.10E+02	1.12E+00	9.46E-02	4.80E+02	1.07E+00
Contribution to air pollution	m³	3.23E+03	1.22E+03	3.40E+00	3.44E-01	2.00E+03	1.14E+01
Contribution to water pollution	m³	3.06E+03	1.03E+03	1.32E+01	1.11E+00	1.95E+03	5.85E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1.51E-01	1.51E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	7.31E+01	5.58E+00	0*	0*	6.75E+01	0*
Total use of non-renewable primary energy resources	MJ	1.05E+03	1.76E+02	1.13E+00	0*	8.76E+02	1.44E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	7.30E+01	5.55E+00	0*	0*	6.75E+01	0*
Use of renewable primary energy resources used as raw material	MJ	2.29E-02	2.29E-02	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.05E+03	1.72E+02	1.13E+00	0*	8.76E+02	1.44E+00
Use of non renewable primary energy resources used as raw material	MJ	4.45E+00	4.45E+00	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	1.76E+01	1.65E+01	0*	0*	0*	1.06E+00
Non hazardous waste disposed	kg	1.77E+02	2.51E+00	0*	0*	1.74E+02	0*
Radioactive waste disposed	kg	1.44E-01	1.67E-03	0*	0*	1.42E-01	0*
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	3.57E-01	3.20E-02	0*	1.26E-01	0*	2.00E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	8.05E-02	0*	0*	0*	0*	8.05E-02
Exported Energy	MJ	1.17E-03	8.10E-04	0*	3.57E-04	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.9.1, database version 2020-12 in compliance with ISO14044.

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.

Depending on the impact analysis, for mineral resource depletion, the environmental indicators of other products in this family may be proportional extrapolated by mass of the product. For Soil and Water acidification, the impacts may be proportional at 5% by the mass of the product and 95% the energy. For water eutrophication, the impact may be proportional at 22% by the mass of the product and 78% the energy. For Global warming, the impacts may be proportional at 18% by the mass of the product and 82% the energy. For Ozone Layer Depletion and Photochemical Oxidation, the impact may be proportional at 10% by the mass of the product and 90% the energy. For Net use of freshwater, the impact may be proportional at 72% by the mass of the product and 28% the energy. For Total Primary Energy, the impact may be proportional at 15% by the mass of the product and 85% the energy.

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	ENVPEP2109012_V1	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	10/2021		
Validity period	5 years	*Information and reference documents*	www.pep-ecopassport.org

Independent verification of the declaration and data

Internal X External

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »

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