Product Environmental Profile

SPACELOGIC KNX BMS IP GATEWAY

as referent product for :
All BMS IP Gateway in KNX range

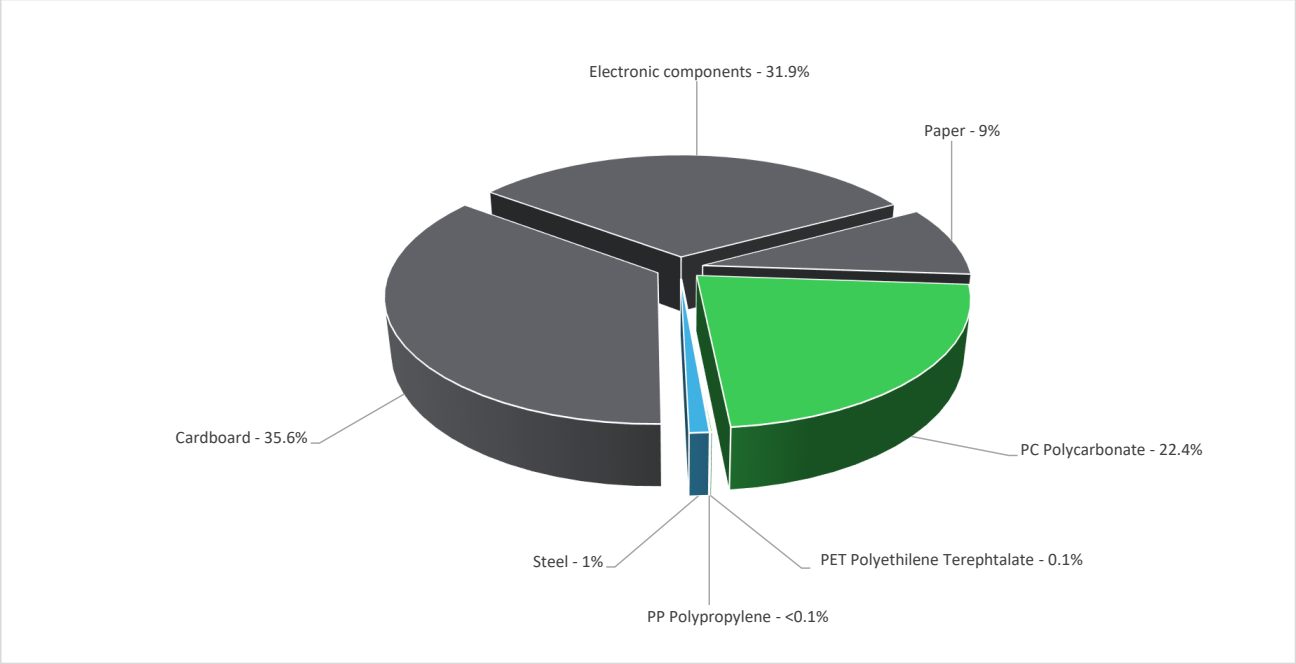
Schneider Electric

General information

Reference product	SPACELOGIC KNX BMS IP GATEWAY - LSS100300
Description of the product	The homeLYnk is the easiest way to visualize and program complex logic in KNX and Modbus networks.
Description of the range	The indicator values of this KNX BMS IP GATEWAY can be extrapolated, based on the Mass and Energy values of the products, for other KNX BMS IP GATEWAY and other current ratings with all finishing types. The environmental impacts of this reference product are representative of the impacts of the other products of the range which are developed with a similar technology.
Functional unit	The device transforms switching and dimming commands from the connected KNX system into corresponding DALI telegrams, or status and event information from the DALI bus into KNX telegrams. It is designed for a permant usage 24h per day. Expected minimal lifetime is 10 years with IP20 in accordance with EN 60529. The device is a Single-Master Controller according to EN 62386 ed/1 and ed/2.

Constituent materials

Reference product mass	257 g	including the product, its packaging and additional elements and accessories



	Plastics	22.5%
	Metals	1.0%
	Others	76.5%

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website
https://www.se.com/ww/en/work/support/green-premium/

Additional environmental information

End Of Life	Recyclability potential:	**2%**	Recyclability rate has been calculated based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the “ECO’DEEE recyclability and recoverability calculation method” was taken. If no data was found a conservative assumption was used (0% recyclability).

Environmental impacts

Reference service life time	10 years
Product category	Other equipments - Active product
Installation elements	No special components needed
Use scenario	The product's energy consumption is 2.88W of In for a 10 years @100%-Use rate.
Technological representativeness	The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are Similar and representative of the actual type of technologies used to make the product in production.
Geographical representativeness	Europe

	[A1 - A3]	[A5]	[B6]	[C1 - C4]
Energy model used	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; FR	Electricity Mix; Production mix; Low voltage; FR	Electricity Mix; Production mix; Low voltage; FR
		Electricity Mix; Production mix; Low voltage; GE	Electricity Mix; Production mix; Low voltage; GE	Electricity Mix; Production mix; Low voltage; GE

Mandatory Indicators		SPACELOGIC KNX BMS IP GATEWAY - LSS100300						
Impact indicators	Unit	Total	Manufacturing [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Benefits [D]
Contribution to climate change	kg CO2 eq	7.98E+01	9.73E+00	7.41E-02	2.12E-01	6.95E+01	3.07E-01	-8.14E-02
Contribution to climate change-fossil	kg CO2 eq	7.97E+01	9.69E+00	7.41E-02	2.03E-01	6.95E+01	2.99E-01	-7.94E-02
Contribution to climate change-biogenic	kg CO2 eq	1.04E-01	3.37E-02	0*	9.44E-03	5.30E-02	7.97E-03	-2.01E-03
Contribution to climate change-land use and land use change	kg CO2 eq	7.43E-08	7.30E-08	0*	1.27E-09	0*	0*	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	2.02E-06	1.48E-06	6.54E-08	1.41E-08	4.44E-07	1.06E-08	-5.82E-09
Contribution to acidification	mol H+ eq	5.80E-01	7.02E-02	3.22E-04	8.43E-04	5.05E-01	4.07E-03	-4.05E-04
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$ eq	5.22E-04	5.02E-05	0*	1.54E-06	4.67E-04	2.80E-06	-6.25E-07
Contribution to eutrophication marine	kg N eq	6.52E-02	7.27E-03	1.48E-04	2.23E-04	5.47E-02	2.91E-03	-8.33E-05
Contribution to eutrophication, terrestrial	mol N eq	8.91E-01	7.74E-02	1.60E-03	1.69E-03	8.09E-01	1.41E-03	-7.39E-04
Contribution to photochemical ozone formation - human health	kg COVNM eq	2.03E-01	2.66E-02	5.26E-04	4.50E-04	1.75E-01	5.70E-04	-2.10E-04
Contribution to resource use, minerals and metals	kg Sb eq	2.03E-03	2.03E-03	0*	0*	7.52E-06	0*	-6.34E-06
Contribution to resource use, fossils	MJ	2.93E+03	1.24E+02	9.00E-01	2.21E+00	2.80E+03	2.13E+00	-1.02E+00
Contribution to water use	m3 eq	5.96E+01	4.33E+00	0*	9.10E-02	3.12E+00	5.21E+01	-4.48E-02

Additional indicators for the French regulation are available as well

Inventory flows Indicators		SPACELOGIC KNX BMS IP GATEWAY - LSS100300						
Inventory flows	Unit	Total	Manufact. [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Benefits [D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	4.48E+02	3.51E+00	0*	1.59E-01	4.45E+02	2.27E-01	2.76E-01
Contribution to use of renewable primary energy resources used as raw material	MJ	9.81E-01	9.81E-01	0*	0*	0*	0*	-4.67E-01
Contribution to total use of renewable primary energy resources	MJ	4.49E+02	4.49E+00	0*	1.59E-01	4.45E+02	2.27E-01	-1.91E-01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2.93E+03	1.21E+02	9.00E-01	2.21E+00	2.80E+03	2.13E+00	-1.01E+00
Contribution to use of non renewable primary energy resources used as raw material	MJ	2.93E+00	2.93E+00	0*	0*	0*	0*	-1.08E-02

Contribution to total use of non-renewable primary energy resources	MJ	2.93E+03	1.24E+02	9.00E-01	2.21E+00	2.80E+03	2.13E+00	-1.02E+00
Contribution to use of secondary material	kg	7.26E-02	7.26E-02	0*	0*	0*	0*	0.00E+00
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to net use of freshwater	m³	1.54E+00	1.01E-01	0*	2.12E-03	7.26E-02	1.36E+00	-1.04E-03
Contribution to hazardous waste disposed	kg	3.17E+01	2.97E+01	0*	0*	1.85E+00	1.49E-01	-5.01E-01
Contribution to non hazardous waste disposed	kg	1.44E+01	3.10E+00	0*	6.91E-01	1.06E+01	6.46E-02	-6.93E-01
Contribution to radioactive waste disposed	kg	2.21E-03	1.29E-03	1.47E-05	9.27E-05	8.15E-04	3.09E-06	-4.21E-05
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.20E-01	5.27E-04	0*	1.17E-01	0*	2.59E-03	0.00E+00
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the product	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00

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

Life cycle assessment performed with EIME version 5.9.4, database version 2022-01 in compliance with ISO14044.

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range, ratios to apply can be provided upon request
The use phase is the life cycle phase, which has the greatest impact on the majority of environmental indicators.

For the GWPlu indicator, the main contribution is a resistor in an electronic component with an impact of 40.4%, and for the ADPe indicator, the main contribution is an integrated circuit in an electronic component with an impact of 47.3% in the manufacturing phase.

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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Validity period	5 years	*Supplemented by*	PSR-0005-ed2-2016 03 29
Date of issue	09/2023	*Information and reference documents*	www.pep-ecopassport.org
Independent verification of the declaration and data, in compliance with ISO 14021 : 2016			
Internal X External			
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)			
PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019			
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. Type II environmental declarations »			

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