Product Environmental Profile

AIDOO CONTROLLER

Registration no.: AIRZ-00002-V01.01-EN		Drafting rules: PCR-ed4-EN-2021 09 06 Supplemented by: PSR-0005-ed3.1-EN-2023 12 08	
Verifier accreditation number: VH39		Information and reference documents: www.pep-ecopassport.org	
Date of issue:	04-2024	Validity period:	5 years
Independent verification of the declaration and data, in compliance with ISO 14025: 2023 Internal: External: **X**			
The PCR review was conducted by a panel of experts chaired by: Julie Orgelet (DDemain)			
PEP is compliant with XP C08-100-1:2016 or EN 50693:2019 or NF E38-500 :2022 The components of the present PEP may not be compared with components from any other program			
Document in compliance with ISO 14025: 2010 “Environmental labels and declarations. Type III environmental declarations”			



This document complies with the ISO 14020 standard for the general principles of environmental declarations, and with the ISO 14025 standard for type III environmental declarations.

Company information

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References Covered

Aidoo Pro Wi-Fi Controller (AZAI6WSP[XXX])

Aidoo Wi-Fi Controller (AZAI6WSC[XXX])

Aidoo KNX Controller (AZAI6KNX[XXX])

Aidoo Z-Wave Controller (AZAI6ZWE[XXX])

Aidoo Zigbee Controller (AZAI6ZBE[XXX])

Methodology

The PEP has been performed according to PCR version ed4-EN-2021 09 06 and PSR version PSR-0005-ed3-EN-2023 06 06 issued by the PEP Ecopassport program. For further information, please see the website of the program www.pep-ecopassport.org

Reference product

Reference product identification: **AZAI6 Aidoo Controller**

Product category: Small Professional Elec. Equip. (Medical & Building & Industry & Research)

Device to manage and integrate air-to-water HP units remotely from the Cloud. Online control with the “Airzone Cloud” App (available for iOS and Android). Wireless Wi-Fi connection. Self-powered by external power supply provided.

Functional unit

Measure and control by time programming the ambient temperature(s) set by the user in a range of X, with a temperature step of Y, in N zones, according to and characterized by a closed contact current IL, according to the appropriate use scenario, and for the reference service life of the product of 20 years. The reference service life is set at 20 years. However, when electronic functions are introduced, the reference lifetime to be considered is 10 years.

X ='0 °C - 35°C'; Y = '0.5°C'; IL = 2 A; N = 1; Volt. range: Low voltage; Current type: Mains

Materials and substances

All relevant measures have been adopted to ensure that the materials used in the composition of the product do not contain any substances banned by the legislation in force at the time of marketing*.

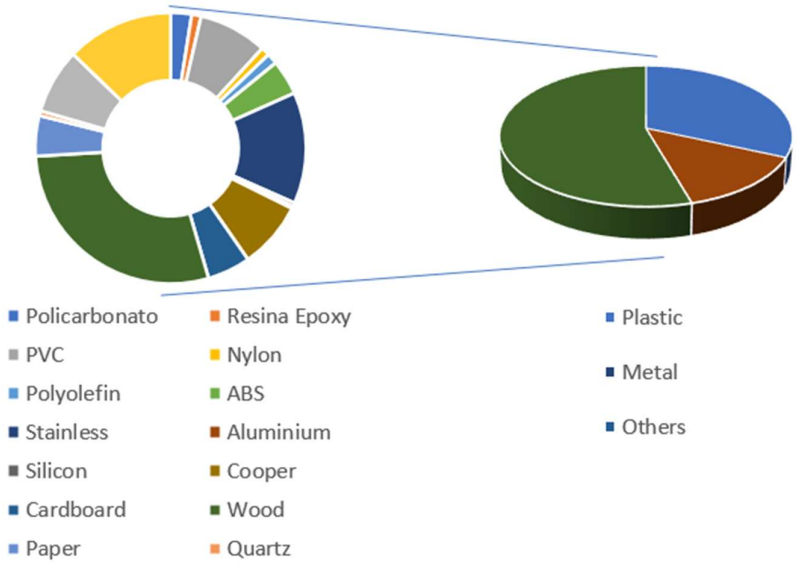
The total weight of the product + packaging is: **0.406 kg**.

PLASTIC						
PC	Epoxy Resin	PVC	Nylon	Phenolic Resin	Polyester Resin	ABS
2.50%	1.13%	8.20%	1.03%	1.30%	4.18%	13.30%

METAL			
Stainless steel	Aluminum	Brass	Copper
0.44%	0.28%	7.99%	5.15%

OTHER				
Cardboard	Paper	Quartz	Wood	Other
28.58%	4.82%	0.58%	7.75%	12.78%

Table 1. Raw material composition



Manufacturing A1 – A3

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in production as well as packaging materials. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

The reference product is one Aidoo Controller. The industrial processes for manufacturing and assembling of the parts are carried out at the Mades Factory. The transportation of raw material to the manufacturing site is accounted for based on PCR-ed4-EN2021 09 06. The transportation distance is 1000 km by truck and 19000 km by boat from Asia for the Electronic part. The transportation distance is 3500 km by truck from Europe for the Mechanical product and packaging. The manufacturing energy is considered based on the country's grid mix and the electricity generation of the manufacturing site (Spain).

The last logistics platform, certified according to the ISO 14001 environmental standard, is located in Malaga, Spain.

Distribution & Installation A4 – A5

The distribution of the product in its packaging from the manufacturer's last logistics platform (A4) (Spain) to the distributor to the installation place (A5) (Europe).

The packaging has been designed in accordance with current regulations, in particular, with European directive 94/62/CE relative to packaging and packaging waste. The used packaging is 100% recyclable or recoverable. Packaging and logistics flows are continuously improved to reduce their impact.

The final installation sites are in Europe and the transportation of the final product to the installation sites is considered based on this.

Installation resources and energy are considered based on the country's grid and the electricity generation of the installation site (Europe).

The treatment of packaging waste is calculated as follows:

MATERIAL	RECYCLING	INCINERATION WITHOUT ENERGY RECOVERY	LANDFILL
Cardboard	90%	5%	5%
PE Film	-	75%	25%
Wood	-	75%	25%

Table 2. Treatment of packaging waste

The collection transport is carried out over 100 km with a 17.3t truck.

Installation processes

The processes to install the product are not considered in this study because of their low impact compared to the other life cycle steps.

Installation elements (not-delivered with the product)

The element not-delivered with the product and needed to install the product is a screwdriver

Product Use (B1-B7)

The reference product does not generate environmental pollution (noise, emissions), so it does not require special precautionary measures under standard use.

For the considered scenario, the product has a consumption when the **closed contact** during 10% of the time, while for 90% of the time, the device remains in **Stand-by Mode** or when the **contact opened**. This corresponds to a total energy consumption of 409.89 kWh for the use span of 10 years. This use-stage scenario is calculated based on the methodology given in PSR -0005-ed3.1-EN-2023 12 08.

Energy model of the use stage: Europe

Consumables and maintenance: None

Product End of Life C1 – C4

Considering the complexity and the lack of knowledge regarding the electric and electronic recycling channel and processes, the standard scenario set in the PCR-ed4-EN-2021 09 06 is considered. The net benefits and loads beyond the system boundaries are also included in the PEP. The net benefits and loads beyond the system boundaries are calculated using substitution point [0:100] by PCR ed.4 in EIME Software and this is correctly applied and modeled in that way.

Homogeneous Environmental Families

Extrapolation coefficients are given for the environmental impact at the level of the product and of the functional unit. For each stage of the life cycle, the environmental impact of the product concerned is calculated by multiplying the impacts of the reference product by the extrapolation coefficient.

Product	AIDOO CONTROLLER				
Technology	AIDOO PRO	AIDOO WIFI	AIDOO KNX	AIDOO Z-WAVE	AIDOO ZIGBEE
Product Reference	**AZAI5WSP**	**AZAI6WSC**	**AZAI6KNX**	**AZAI6ZWE**	**AZAI6ZBE**
Consumption (W)	1.85	0.85	0.85	0.31	0.31
RLT (year)	10	10	10	10	10
Product mass (kg)	0,249	0,161	0,149	0,211	0,211
Aidoo Controller mass (kg)	0,130	0,087	0,090	0,088	0,088
User Manual mass (kg)	0,013	0,013	0,013	0,013	0,013
Accessories mass (kg)	0,066	0,061	0,046	0,109	0,109
AC/DC power supply mass (kg)	00,039	0,000	0,000	0,000	0,000
Packaging mass (kg)	0,139	0,139	0,139	0,139	0,139
Ctot (kWh)	162.06	74.46	74.46	27.16	27.16

Table 3. Data Information for Aidoo Controller

Product	AIDOO CONTROLLER				
Technology	AIDOO PRO	AIDOO WIFI	AIDOO KNX	AIDOO Z-WAVE	AIDOO ZIGBEE
Product Reference	**AZAI6WSP**	**AZAI6WSC**	**AZAI6KNX**	**AZAI6ZWE**	**AZAI6ZBE**
Manufacturing	1.00	0.77	0.74	0.90	0.90
Distribution	1.00	0.77	0.74	0.90	0.90
Installation	1.00	1.00	1.00	1.00	1.00
Use	1.00	0.46	0.46	0.17	0.17
End of Life	1.00	0.65	0.60	0.85	0.85

Table 4. Extrapolation coefficients at FUNCTIONAL unit level

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
AIDOO PRO	AZAI6WSPDA0	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPDA1	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPFU2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPFUJ	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPHI2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPHIT	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPLGE	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPMEL	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPPA0	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPPAN	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPFAN	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPMD1	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPMHI	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPSA2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPHI3	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPHS2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPHS1	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPTOS	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGR1	1.00	1.00	1.00	1.00	1.00

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
AIDOO PRO	AZAI6WSPGRE	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGR2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPMD2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGM2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGM1	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGG1	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGG2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGG3	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPMD4	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGM4	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPDA2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPMD3	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPHAI	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPPA2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPME2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPHI4	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGM3	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPDK2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPML2	1.00	1.00	1.00	1.00	1.00

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
AIDOO PRO	AZAI6WSPGH1	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPGH2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPDN2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPDN0	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPDN1	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPPN0	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPPN2	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPPN1	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPMPN	1.00	1.00	1.00	1.00	1.00
	AZAI6WSPDA4	1.00	1.00	1.00	1.00	1.00

Table 5. Aidoo Pro

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
Wi-Fi	AZAI6WSCTOS	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCSA2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCPAN	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCPA0	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCMHI	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCMEL	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCMD2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCMD1	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCLGE	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCHS2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCHIT	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCHI2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGRE	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGR2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGR1	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCFUJ	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCFU2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCDA2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCDA1	0.77	0.77	1.00	0.46	0.65

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
	AZAI6WSCDA0	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGG1	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGG2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGG3	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGM1	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGM2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCHT2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCMG3	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCMD4	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGM4	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCGH2	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCDN0	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCDN1	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCPN0	0.77	0.77	1.00	0.46	0.65
	AZAI6WSCPN1	0.77	0.77	1.00	0.46	0.65

Table 6. Aidoo Wi-Fi

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
KNX	AZAI6KNXTOS	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXSA2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXPAN	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXPA0	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXMHI	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXMEL	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXMD2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXMD1	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXLGE	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXHS2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXHS1	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXHIT	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXHI3	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXHI2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGRE	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGR2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGR1	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXFUJ	0.74	0.74	1.00	0.46	0.60

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
KNX	AZAI6KNXFU2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXDA1	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXDA0	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXBAX	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXBA1	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGG1	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGG2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGG3	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGM1	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGM2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXHT2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXHT3	0.74	0.74	1.00	0.46	0,60
	AZAI6KNXMG3	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXMD4	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGM4	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGH1	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXGH2	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXPN0	0.74	0.74	1.00	0.46	0.60
	AZAI6KNXPN1	0.74	0.74	1.00	0.46	0.60

Table 7. Aidoo KNX

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
Z-WAVE	AZAI6ZWEDA0	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEDA1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEFUJ	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEFU2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEHIT	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEHI2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWELGE	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEMEL	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEPAN	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEPA0	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEMD4	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWETOS	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGG1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGG2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGG3	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGM1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGM2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGM4	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGR1	0.90	0.90	1.00	0.17	0.85

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
Z-WAVE	AZAI6ZWEGR2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGRE	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEMD1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEMD2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEMHI	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEHS1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEHS2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWESA2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEHI3	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEHAI	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGH1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZWEGH2	0.90	0.90	1.00	0.17	0.85

Table 8. Aidoo Z-Wave

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
ZIGBEE	AZAI6ZBEDA0	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEDA1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEFUJ	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEFU2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEHI2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEHIT	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBELGE	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEMEL	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEPA0	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEPAN	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEMHI	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGRE	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGG1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGR1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGG2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGR2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGG3	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEHI3	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEHS1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGH1	0.90	0.90	1.00	0.17	0.85

Technology	Product Reference	Manufacturing	Distribution	Installation	Use	End of Life
ZIGBEE	AZAI6ZBEHS2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGH2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEMD1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGM1	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEMD2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGM2	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEMD4	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBEGM4	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBETOS	0.90	0.90	1.00	0.17	0.85
	AZAI6ZBESA2	0.90	0.90	1.00	0.17	0.85

Table 9. Aidoo ZigBee

Environmental impacts

The evaluation of the environmental impact covers the following life cycle stages: manufacturing, distribution, installation, use, and end of life.

Energy model for the manufacturing, installation, use and end of life:

Energy model for manufacturing: ELCD - Electricity Mix; 1kV - 60kV; 2008; Spain, ES.

Energy model for installation, use, and end of life: Electricity Mix; Low voltage; 2018; Europe, EU-27

All calculations are done with EIME software version 6.2-11.

The product category and use scenario will be in Europe.

Resource use

NAME	UNIT	SUM	A1 - A3 MANUFACTURING	A4 DISTRIBUTION	A5 INSTALLATION	B1 - B7 USE	C1 - C4 END OF LIFE
Net use of freshwater	(m^3)	2,21E-01	8,19E-02	7,33E-07	-1,43E-04	1,38E-01	7,46E-04
Total Primary Energy	(MJ)	5,34E+03	2,38E+02	1,16E-01	1,65E+00	5,10E+03	2,78E-01
Total use of non-renewable primary energy resources	(MJ)	4,50E+03	2,22E+02	1,16E-01	1,28E+00	4,28E+03	2,65E-01
Total use of renewable primary energy resources	(MJ)	8,38E+02	1,58E+01	1,54E-04	3,64E-01	8,22E+02	1,29E-02
Contribution to use of non-renewable primary energy excluding non-renewable primary energy used as raw material	(MJ)	4,50E+03	2,17E+02	1,16E-01	1,28E+00	4,28E+03	2,65E-01
Use of non-renewable primary resources used as raw material	(MJ)	5,38E+00	5,38E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable secondary fuels	(MJ)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

NAME	UNIT	SUM	A1 - A3 MANUFACTURING	A4 DISTRIBUTION	A5 INSTALLATION	B1 - B7 USE	C1 - C4 END OF LIFE
Use of renewable primary energy excluding renewable primary energy used as raw material	(MJ)	8,35E+02	1,31E+01	1,54E-04	3,64E-01	8,22E+02	1,29E-02
Use of renewable primary energy resources used as raw material	(MJ)	2,65E+00	2,65E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels	(MJ)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary material	(kg)	1,66E-02	1,66E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Hazardous waste disposed	(kg)	1,10E+01	7,81E+00	0,00E+00	3,14E-03	3,14E+00	6,14E-02
Non-hazardous waste disposed	(kg)	2,84E+01	4,00E+00	2,91E-04	6,31E-02	2,42E+01	1,40E-01
Radioactive waste disposed	(kg)	6,93E-03	1,86E-03	2,07E-07	7,70E-06	5,06E-03	4,81E-06
Components for reuse	(kg)	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported Energy	(MJ)	4,98E-02	3,76E-03	0,00E+00	2,04E-04	0,00E+00	4,58E-02
Materials for energy recovery	(kg)	1,72E-09	1,72E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	(kg)	3,97E-02	3,01E-03	0,00E+00	1,51E-02	0,00E+00	2,16E-02

Impact Indicators

NAME	UNIT	SUM	A1 - A3 MANUFACTURING	A4 DISTRIBUTION	A5 INSTALLATION	B1 - B7 USE	C1 - C4 END OF LIFE
Acidification	(mol H+ eq.)	1,07E+00	1,06E-01	5,25E-05	4,08E-04	9,59E-01	2,85E-04
Climate change	(kg CO_2 eq.)	1,84E+02	1,61E+01	8,30E-03	1,65E-01	1,68E+02	2,69E-01
Climate change - biogenic	(kg CO_2 eq.)	4,15E-01	1,78E-01	0,00E+00	8,33E-03	2,24E-01	4,82E-03
Climate change - fossil	(kg CO_2 eq.)	1,84E+02	1,59E+01	8,30E-03	1,57E-01	1,68E+02	2,64E-01
Contribution to climate change - land use and land use change	(kg CO2 eq.)	5,64E-08	1,58E-08	0,00E+00	-1,05E-09	0,00E+00	4,17E-08
Ecotoxicity, freshwater	(CTUe)	2,11E+03	2,79E+02	5,59E-03	1,55E+00	1,81E+03	1,78E+01
EF - particulate matter	(Disease occurrence)	8,04E-06	6,01E-07	4,27E-10	2,41E-09	7,44E-06	1,98E-09
Contribution to eutrophication, freshwater	(kg P eq.)	5,49E-04	3,01E-05	3,11E-09	1,84E-06	4,60E-04	5,74E-05
Contribution to eutrophication, marine	(kg N eq.)	1,20E-01	1,09E-02	2,46E-05	1,88E-04	1,09E-01	8,54E-05
Contribution to eutrophication, terrestrial	(mol N eq.)	1,75E+00	1,16E-01	2,70E-04	1,23E-03	1,64E+00	6,54E-04
Human toxicity, cancer	(CTUh)	3,44E-07	2,85E-07	1,46E-13	1,42E-08	1,96E-08	2,52E-08

NAME	UNIT	SUM	A1 - A3 MANUFACTURING	A4 DISTRIBUTION	A5 INSTALLATION	B1 - B7 USE	C1 - C4 END OF LIFE
Human toxicity, non-cancer	(CTUh)	9,90E-07	2,06E-07	1,58E-11	5,85E-10	7,77E-07	6,49E-09
Ionizing radiation, human health	(kBq U235 eq.)	3,02E+02	5,20E+01	2,02E-05	1,97E-02	2,50E+02	1,51E-03
Land use	(No dimension)	3,10E+00	-3,54E-01	0,00E+00	1,40E-02	3,34E+00	1,00E-01
Ozone depletion	(kg CFC-11 eq.)	1,39E-05	1,32E-05	1,27E-11	1,78E-09	7,18E-07	1,47E-09
Contribution to photochemical ozone formation - human health	(kg NMVOC eq.)	3,89E-01	3,91E-02	6,81E-05	2,88E-04	3,50E-01	1,83E-04
Contribution to resource use, fossils	(MJ)	4,50E+03	2,22E+02	1,16E-01	1,28E+00	4,28E+03	2,65E-01
Contribution to resource use, minerals and metals	(kg SB eq.)	8,30E-04	8,17E-04	3,26E-10	3,46E-09	1,22E-05	1,35E-06
Contribution to water use	(m^3 eq.)	9,51E+00	3,54E+00	3,15E-05	-6,14E-03	5,94E+00	3,20E-02

**All the indications mentioned in this document (characteristics and dimensions) are subject to modifications, therefore, they cannot constitute a commitment.*