



Smoke detector EI3000 series

Product Environmental Profile

Registration number	EIEL-00001-V01.01-EN	Drafting rules	PEP-PCR-ED4-EN-2021 09 06
Verifier accreditation number	VH 30	Supplemented by	PSR-0019-ED1.0-EN-2023 06 06
Date of issue	10/07/2026	Validity period	5 years
EPD prepared by	Sphera Solutions GmbH		
Independent verification of the declaration and data in compliance with ISO 14025: 2006			
Internal		External	X
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 or NF E38-500 :2022			
The elements of the present PEP cannot be compared with elements from another program.			
Document in compliance with ISO 14025 : 2006 « Environmental labels and declarations. Type III environmental declarations»			

1. General information

1.1 Product information

The product is manufactured by EI electronics, based in Shannon, Ireland, is a leading manufacturer of fire and gas detection products.

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The EI3000 Series are a mains powered series of smoke, heat, carbon monoxide and multi sensor alarms for residential use. These alarms all use 230V AC mains power supply with rechargeable lithium battery back-up.

Table 1 summarizes the key technological data of the analyzed product.

Table 1: Key technological data

Information	Unit	
Product code	-	5XC2A51F08GE
Power supply	-	50/60 Hz AC
Nominal operating voltage	V	220 – 240
Declared lifetime of the smoke detector	Hours	100,000
Electrical input power	W	23
Length	mm	157
Width/Diameter	mm	736
Height	mm	174
Reference use scenario	-	116

The criteria of the PSR-0019-ED1.0-EN-2023 06 06 regarding product families have been used to form a homogenous group of EI Electronics products and enable the extrapolation of the EPD results of the reference product to others. The family consists of the following products:

- EI3014 - Mains powered heat alarm (reference product)
- EI3016 – Mains powered smoke alarm
- EI3018 – Mains powered carbon monoxide alarm
- EI3024 – Mains powered smoke and heat alarm (Multi Sensor)
- **EI3028 – Mains powered heat and carbon monoxide alarm (Multi Sensor) – reference product**
- EI3030 – Mains powered smoke, heat and carbon monoxide alarm (Multi Sensor)

Based on the declared lifetime of the smoke detector and the average annual operating hours by the selected building type according to EN 13201-5:2016, the smoke detector has the following annual service time:

Table 2: Use scenario

Type of building	Operational lifetime (years) of the product	Operational lifetime (years) of functional unit
Indoor application (urban / tunnel / zone, open space)	10	12

The lifetime of the product is 10 years but according to the PSR the functional unit will be calculated for 12 years.

1.2 Overview

The general information used for the EPD are listed below:

Fire Detection and Fire Alarm FDAS make it possible to automatically detect the start of a fire inside a building thanks to an automatic measurement. They can be addressable or conventional.

A conventional FDAS is a detector that uses communication technology with the control unit that does not allow it to be identified individually, unlike an addressable FDAS.

This automatic measurement captures one of the following physical quantities:

- Increase of a temperature
- Opacification of the atmosphere by smoke and carbon monoxide
- Infrared or ultraviolet radiation (flame optics)

Type of fire detection system and the list of applicable standards are to be identified.

Automatic fire detectors communicate with control and indicating equipment (CIE).

Table 3: Basic EPD information

Information	
Functional unit	Detecting a fire starting inside a building by automatically measuring a physical quantity while respecting the rules for installing fire systems. This function is ensured for a lifetime of 12 years
Reference flow / declared unit*	1.2 piece per functional unit
Life cycle stages covered (according to EN15804+A2)	Cradle-to-grave and Module D
Product category according to PSR	Fire Detection and Fire Alarm FDAS
Product family name	EI3000
All products of the product family	EI3028 (reference product) EI3030 EI3016 EI3014 EI3018 EI3024
Extrapolation rules	The tables in the last section provide information about the used extrapolation rules and the resulting extrapolation factors according to the applied PSR.

The reference service life is also referred to as “typical”. This is a theoretical period used for calculation purposed. It can never be compared to the minimum, average or actual lifetimes of the products.

The lifetime of the product is 10 years but according to the PSR the functional unit will be calculated for 12 years. The results will be calculated with the scaling factor, as shown:

$$(\text{no. of years according to PSR}) / (\text{no. of years of use of the product}) * (\text{results of the LCA})$$

$$12/10 = 1.2 * (\text{results of the LCA})$$

2 Constituent materials

2.1 Overview

Table 4: Packed product composition

Information	Weight [in kg]	Share [in %]
Total weight	0.35	100.00
Product	0.31	83.57
Packaging	0.04	11.43

2.2 Product

Table 5: Material composition - product

Information	Weight [in kg]	Share [in %]
Total weight	0.31	100.0
Plastics	0.22	70.79
- Polycarbonate PC	0.00042	0.19
- High Impact Polystyrene Granulate	0.0019	0.86
- Polycarbonate ABS Blend	0.21	95.45
- Acrylonitrile-butadiene-styrene ABS Part	0.0026	1.18
- Carbon Fibres	5,8E-005	0.03
- Polyamide PA6	0.0006	0.27
- Low Density Polyethylene Film LDPE	0.0041	1.86
- Polyethylene Foam	0.0016	0.73
Metals	0.017	5.48
- Stainless Steel	0.0032	18.82
- Brass	0.0026	15.29
- Galvanised Screws	0.0071	41.76
- Platinum	8.7E-006	0.05
- Aluminium Sheet (AlCu4Mg1)	0.0039	22.94
Electronics	0.059	19.03
Others	0.017	5.48
- Kraftliner Paper	0.0068	40
- Sulphuric acid	9.7E-007	0.01
- Coin Cell BR Series (Li/Poly-carbonmonofluoride - RB0.8; RS0.65)	0.011	64.71

2.3 Packaging

Table 6: Material composition - packaging

Information	Weight [in kg]	Share [in %]
Total weight	0.04	100.00
Paper/cardboard	0.04	100.00

3 Information on life cycle stages

3.1 Manufacturing (A1-A3)

Electronic components are largely sourced from Asia, mechanical components from Europe. The Electronic control gear is then manufactured in Ireland. Other production steps at the EI Electronics factory in Shannon, Co. Clare, Ireland are the manufacturing of modules, plastic injection moulding and coating of reflectors, painting of housing and final assembly, as well as parameterization of the product. Main inputs of these processes are electricity, thermal energy, and water.

Afterwards the product is packed in packaging materials and distributed to the client. The process flow is summarized in Figure 3-1.

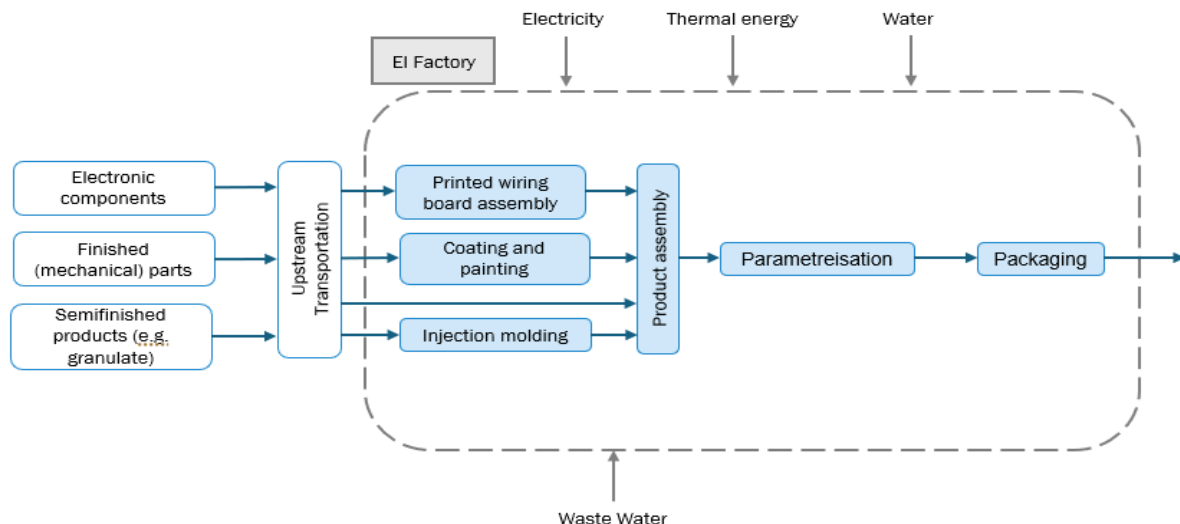


Figure 3-1: Manufacturing (A1-A3)

3.2 Distribution (A4)

This module considers intracontinental transport with 730 km by truck (diesel driven, EURO 0-6, >27t payload, 85% utilization). The transport distance has been calculated as weighted average based on the main markets DACH-region (UK, Germany, Austria, Switzerland – 70% - 400 km by truck) and Rest of Europe (30% - 1.500 km by truck). The background assumptions for transportation are listed below.

Table 7: Background information distribution

Information	Unit	Truck
Fuel type	-	Diesel
Fuel consumption	l/(kg*km)	1.99E-05
Total distance	km	730
Capacity utilisation (including empty runs)	%	85
Bulk density of transported products	kg/m3	n.a.
Volume capacity utilisation factor	-	n.a.

3.3 Installation (A5)

Since no energy or materials are required to install the reference product, the module accounts for the treatment and disposal of packaging material exclusively. EI Electronics uses partnerships to increase the recycling rate of their packaging waste. Therefore, the study considers that 80% of the packaging materials is recycled, whereas the rest is incinerated with an energy recovery. Credits for potential avoided burdens of primary material and energy production are declared in module D.

3.4 Use stage (B1-B6)

The product has no direct emissions (B1) and is designed so that no maintenance is required (B2) or parts need to be replaced (B4). Furthermore, no standard repairs (B3) or refurbishments (B5) are foreseen. The use of the product does not require any water consumption (B7).

The operational energy use consists of the electricity consumption over the entire lifetime of the product. The product has no light management function and is therefore calculated according to PSR-0019-ED1.0-EN-2023 06 06 as product of the declared typical power consumption of the lighting circuit in (in kilowatts) and the assigned lifetime (in hours).

The main market of the product is Europe with a special focus on the UK and DACH-region, influencing the selection of representative datasets for the operational electricity consumption (B6) and the end-of-life scenario (C1-C4).

3.5 End of life (C1-C4)

No environmental burdens are considered in C1, since the product can be deconstructed manually.

The End-of-life (EoL) stage considers a default distance for the shipment of collected waste to approved treatment centers of 1,000 km by truck (diesel driven, EURO 0-6, >27t payload, 85% utilization) according to PSR-0019-ED1.0-EN-2023 06 06 (C2).

Primary data by EI Electronics on the treatment of the product has been used. Incineration with energy recovery accounts for 100%.

The recycling scenario considers recycling processes for all metals and incineration with energy recovery for all other material groups.

The product falls under the Waste from Electrical and Electronic Equipment (WEEE) directive 2012/19/EU subcategory 4. Primary data on the treatment of the product has been used. The EoL scenario displays an European average and is the following:

- Incineration without energy recovery: 5%
- Incineration with energy recovery: 5%
- Landfilling: 5%
- Recycling¹: 85%

¹ The recycling scenario for the product excl. packaging considers recycling processes for all metals and incineration with energy recovery for all other material groups.

3.6 Benefits and loads beyond the system boundaries stage (D)

Based on the EoL scenario (C3), the study considers that metals and precious metals from electronic components are recovered in the recycling process. Plastic parts are incinerated in the recycling pathway due to their relatively low economic value. The avoidance of primary material & energy production is considered as credits (substitution approach – net scrap) and considered as benefits outside the product system (Module D). Same applies on the other EoL pathways and the benefits generated in the recycling and incineration of packaging which is considered as part of Module A5.

Avoided burdens have been calculated by the inversion of the raw material production, electricity grid mix and thermal energy from natural gas, using European datasets.

The incineration with energy recovery and recycling of the product and packaging generates environmental benefits by avoiding the production of primary materials or energy. The amount and types of waste streams from the product and packaging are listed in Table 8.

Table 8: Material flows for benefits and loads beyond the system boundaries

Information	Unit	Value
Total weight going into re-use	kg/functional unit	0.00
Total weight going into recycling	kg/functional unit	0
Total weight going into incineration with energy recovery	kg/functional unit	0.37

4 Environmental impacts

4.1 Introduction

The following table summarizes the key information for the calculation of the environmental impacts:

Table 9: Basic information LCA model

Information	Value
Used LCA software	LCA for Experts
Used LCI database	LCA FE Professional 2024.2 + Extension 2024.2
PCR version	PEP-PCR-ED4-EN-2021 09 06
PSR version	PEP- PSR-0019-ED1.0-EN-2023 06 06
Functional unit	Detecting a fire starting inside a building by automatically measuring a physical quantity while respecting the rules for installing fire systems. This function is ensured for a lifetime of 12 years

4.2 Results per functional unit

The following results of the environmental declaration have been developed by considering the electricity use of 87 kWh over a reference lifetime of 10 years. The results refer to the core environmental impact indicators and indicators describing resource use, waste categories, and output flows according to EN 15804:2012+A2:2019.

Table 10: Results core environmental impact indicators per functional unit (0.54 kg product incl. packaging)

	Total (excl. D)	Raw materials & parts		Manufacturing	Distribution	Installation	Use		End of life				Benefits and loads beyond the system boundaries
		A1	A2	A3	A4	A5	B2	B6	C1	C2	C3	C4	D
GWP - total [kg CO ₂ eq.]	6,17E+01	6,01E+00	4,94E-03	2,30E+00	1,63E-01	6,43E-02	0,00E+00	5,23E+01	0,00E+00	3,32E-02	7,98E-01	1,49E-07	-2,60E-01
GWP - fossil [kg CO ₂ eq.]	6,12E+01	6,01E+00	4,78E-03	2,35E+00	1,61E-01	1,50E-03	0,00E+00	5,18E+01	0,00E+00	3,12E-02	7,94E-01	6,92E-08	-2,59E-01
GWP - bio-genic [kg CO ₂ eq.]	4,65E-01	-1,55E-02	8,63E-05	-5,27E-02	3,85E-04	6,28E-02	0,00E+00	4,66E-01	0,00E+00	1,55E-03	2,93E-03	7,91E-08	-1,06E-03
GWP - luluc [kg CO ₂ eq.]	1,90E-02	7,22E-03	7,92E-05	5,77E-04	2,71E-03	9,96E-07	0,00E+00	7,87E-03	0,00E+00	5,18E-04	2,46E-05	4,06E-11	-2,41E-05
ODP [kg CFC-11 eq.]	1,22E-09	3,79E-11	6,98E-16	4,82E-12	2,38E-14	8,78E-15	0,00E+00	1,17E-09	0,00E+00	4,55E-15	2,20E-13	5,39E-19	-8,68E-13
AP [Mole of H+ eq.]	1,43E-01	3,96E-02	2,36E-05	2,44E-03	9,97E-04	1,79E-05	0,00E+00	1,00E-01	0,00E+00	5,26E-05	2,75E-04	1,73E-10	-2,65E-04
EP - freshwater [kg P eq.]	2,60E-04	3,86E-05	2,02E-08	1,57E-06	6,88E-07	2,51E-09	0,00E+00	2,15E-04	0,00E+00	1,32E-07	4,50E-06	9,97E-11	-1,27E-07

EP - marine [kg N eq.]	3,14E-02	4,96E-03	1,09E-05	8,38E-04	4,82E-04	6,59E-06	0,00E+00	2,50E-02	0,00E+00	2,09E-05	1,08E-04	4,22E-10	-8,36E-05
EP - terres- trial [Mole of N eq.]	3,31E-01	5,30E-02	1,21E-04	9,13E-03	5,35E-03	8,21E-05	0,00E+00	2,62E-01	0,00E+00	2,42E-04	1,31E-03	5,32E-10	-9,20E-04
POCP [kg NMVOC eq.]	8,53E-02	1,56E-02	2,22E-05	2,35E-03	9,43E-04	1,75E-05	0,00E+00	6,61E-02	0,00E+00	5,16E-05	2,39E-04	1,33E-10	-2,42E-04
ADPE [kg Sb eq.]	4,47E-04	4,37E-04	4,12E-10	2,16E-07	1,40E-08	9,29E-11	0,00E+00	9,70E-06	0,00E+00	2,69E-09	2,20E-09	3,90E-15	-2,40E-08
ADPF [MJ]	1,21E+03	8,74E+01	6,28E-02	3,50E+01	2,14E+00	1,98E-02	0,00E+00	1,09E+03	0,00E+00	4,07E-01	3,48E-01	6,59E-07	-3,86E+00
WDP [m³ world equiv.]	1,58E+01	1,34E+00	7,31E-05	9,17E-02	2,50E-03	7,99E-03	0,00E+00	1,43E+01	0,00E+00	4,78E-04	6,40E-02	-6,90E-06	-9,80E-03

Table 11: Results indicators describing resource use, waste categories, and output flows per functional unit (0,54 kg product incl. packaging)

Indicator	Acronym [Unit]	Total (excl. D)
Renewable primary energy (without raw material)	PERE [MJ]	8,36E+02
Renewable primary energy (raw material)	PERM [MJ]	2,53E-01
Total use of renewable primary energy	PERT [MJ]	8,36E+02
Non-renewable primary energy (without raw material)	PENRE [MJ]	1,21E+03
Non-renewable primary energy (raw material)	PENRM [MJ]	1,37E-01
Total use of non-renewable primary energy	PENRT [MJ]	1,21E+03
Use of secondary materials	SM [kg]	7,97E-03
Net use of fresh water	FW [m3]	6,54E-01
Hazardous waste disposed	HWD [kg]	5,62E-06
Non-hazardous waste disposed	NHWD [kg]	1,28E+00
Radioactive waste disposed	RWD [kg]	1,77E-01
Components for reuse	CRU [kg]	0,00E+00
Materials for recycling	MFR [kg]	0,00E+00
Materials for energy recovery	MER [kg]	4,44E-01
Exported electricity	EEE [MJ]	2,47E+00
Exported thermal energy	EET [MJ]	4,35E-01
Biogenic carbon content of the associated packaging	Biog. C in packaging [kg]	-4,80E-05
Particulate matter	[Disease incidences]	1,29E-06
Ionising radiation, human health	[kBq U235 eq.]	2,90E+01
Ecotoxicity, freshwater	[CTUe]	3,86E+02
Human toxicity, cancer	[CTUh]	2,68E-08
Human toxicity, non-cancer	[CTUh]	3,59E-07
Land Use	[Pt]	4,87E+02

4.3 Results per unit of product

The following results of the environmental declaration have been developed by considering the entire life cycle of one product with the technical properties described in section 4.1. The results refer to the core

environmental impact indicators and indicators describing resource use, waste categories, and output flows according to EN 15804:2012+A2:2019. The reference service life of the product is 10 years.

Table 12: Results of core environmental impact indicators per unit of product

	Total (excl.D)	Raw materials & parts	Manu- facturing	Distri- bution	Install- ation	Use	End of life						Benefits and loads beyond the sys- tem bounda- ries
		A1	A2	A3	A4	A5	B2	B6	C1	C2	C3	C4	D
GWP - total [kg CO ₂ eq.]	5,14E+01	5,01E+00	4,12E-03	1,92E+00	1,36E-01	5,36E-02	0,00E+00	4,36E+01	0,00E+00	2,77E-02	6,65E-01	1,24E-07	-2,17E-01
GWP - fossil [kg CO ₂ eq.]	5,10E+01	5,01E+00	3,98E-03	1,96E+00	1,34E-01	1,25E-03	0,00E+00	4,32E+01	0,00E+00	2,60E-02	6,62E-01	5,77E-08	-2,16E-01
GWP - bio- genic [kg CO ₂ eq.]	3,88E-01	-1,29E-02	7,19E-05	-4,39E-02	3,21E-04	5,23E-02	0,00E+00	3,88E-01	0,00E+00	1,29E-03	2,44E-03	6,59E-08	-8,83E-04
GWP - luluc [kg CO ₂ eq.]	1,58E-02	6,02E-03	6,60E-05	4,81E-04	2,26E-03	8,30E-07	0,00E+00	6,56E-03	0,00E+00	4,32E-04	2,05E-05	3,38E-11	-2,01E-05
ODP [kg CFC- 11 eq.]	1,01E-09	3,16E-11	5,82E-16	4,02E-12	1,98E-14	7,32E-15	0,00E+00	9,79E-10	0,00E+00	3,79E-15	1,83E-13	4,49E-19	-7,23E-13
AP [Mole of H+ eq.]	1,20E-01	3,30E-02	1,97E-05	2,03E-03	8,31E-04	1,49E-05	0,00E+00	8,34E-02	0,00E+00	4,38E-05	2,29E-04	1,44E-10	-2,21E-04
EP - freshwa- ter [kg P eq.]	2,17E-04	3,22E-05	1,68E-08	1,31E-06	5,73E-07	2,09E-09	0,00E+00	1,79E-04	0,00E+00	1,10E-07	3,75E-06	8,31E-11	-1,06E-07
EP - marine [kg N eq.]	2,62E-02	4,13E-03	9,11E-06	6,98E-04	4,02E-04	5,49E-06	0,00E+00	2,08E-02	0,00E+00	1,74E-05	8,99E-05	3,52E-10	-6,97E-05
EP - terres- trial [Mole of N eq.]	2,76E-01	4,42E-02	1,01E-04	7,61E-03	4,46E-03	6,84E-05	0,00E+00	2,18E-01	0,00E+00	2,02E-04	1,09E-03	4,43E-10	-7,67E-04
POCP [kg NMVOC eq.]	7,11E-02	1,30E-02	1,85E-05	1,96E-03	7,86E-04	1,46E-05	0,00E+00	5,51E-02	0,00E+00	4,30E-05	1,99E-04	1,11E-10	-2,02E-04
ADPE [kg Sb eq.]	3,72E-04	3,64E-04	3,43E-10	1,80E-07	1,17E-08	7,74E-11	0,00E+00	8,08E-06	0,00E+00	2,24E-09	1,83E-09	3,25E-15	-2,00E-08
ADPF [MJ]	1,01E+03	7,28E+01	5,23E-02	2,92E+01	1,78E+00	1,65E-02	0,00E+00	9,06E+02	0,00E+00	3,39E-01	2,90E-01	5,49E-07	-3,22E+00
WDP [m ³ world equiv.]	1,32E+01	1,12E+00	6,09E-05	7,64E-02	2,08E-03	6,66E-03	0,00E+00	1,19E+01	0,00E+00	3,98E-04	5,33E-02	-5,75E-06	-8,17E-03

Table 13: Results indicators describing resource use, waste categories, and output flows per unit of product

Indicator	Acronym [Unit]	Total (excl. D)
Renewable primary energy (without raw material)	PERE [MJ]	6,97E+02
Renewable primary energy (raw material)	PERM [MJ]	2,11E-01
Total use of renewable primary energy	PERT [MJ]	6,97E+02
Non-renewable primary energy (without raw material)	PENRE [MJ]	1,01E+03
Non-renewable primary energy (raw material)	PENRM [MJ]	1,14E-01
Total use of non-renewable primary energy	PENRT [MJ]	1,01E+03
Use of secondary materials	SM [kg]	6,64E-03
Net use of fresh water	FW [m3]	5,45E-01
Hazardous waste disposed	HWD [kg]	4,68E-06
Non-hazardous waste disposed	NHWD [kg]	1,07E+00
Radioactive waste disposed	RWD [kg]	1,47E-01
Components for reuse	CRU [kg]	0,00E+00

Materials for recycling	MFR [kg]	0,00E+00
Materials for energy recovery	MER [kg]	3,70E-01
Exported electricity	EEE [MJ]	2,05E+00
Exported thermal energy	EET [MJ]	3,62E-01
Biogenic carbon content of the associated packaging	Biog. C in packaging [kg]	-4,00E-05
Particulate matter	[Disease incidences]	1,90E+02
Ionising radiation, human health	[kBq U235 eq.]	1,08E-06
Ecotoxicity, freshwater	[CTUe]	2,42E+01
Human toxicity, cancer	[CTUh]	3,21E+02
Human toxicity, non-cancer	[CTUh]	2,23E-08
Land Use	[Pt]	2,99E-07
Ionising radiation, human health	[kBq U235 eq.]	4,06E+02

5. Extrapolation rules

The extrapolation coefficients included in the PEP Eco-passport have been developed according to the valid PCR & PSR. Table 14 shows the key properties of the reference product, function as extrapolation basis.

Table 14: Reference values for the extrapolation

Parameter	Unit	Reference value (EI3028)
Weight of structural/mechanical parts	kg	0.24
Weight of electronics	kg	0.06
Weight of product (excl. packaging)	kg	0.31
Weight of packaging	kg	0.04
Typical power consumption	kW/Hr	2.18
Weight of product (incl. packaging)	kg	0.35
Battery weight	kg	0.01

The extrapolation at the level of the functional unit needs to be done according to the following formulas:

Manufacturing stage:

$$f_{mfg} = f_1 * s_1 + f_2 * s_2 + f_3 * s_3 + f_4 * s_4$$

➔ Mechanical parts & packaging

$$f_1 = \frac{\text{Weight of mechanical parts \& packaging of the concerned product (kg)}}{\text{Weight of mechanical parts \& packaging of the reference product (kg)}}$$

$$s_1 = \frac{\text{Weight of mechanical parts \& packaging of the reference product (kg)}}{\text{Total weight (incl. packaging) of the reference product (kg)}}$$

➔ Power equipment

$$f_2 = \frac{\text{Weight of power equipment of the concerned product (kg)}}{\text{Weight of power equipment of the reference product (kg)}}$$

$$s_2 = \frac{\text{Weight of power equipment of the reference product (kg)}}{\text{Total weight (incl. packaging) of the reference product (kg)}}$$

Distribution stage:

$$f_{dis} = \frac{\text{Total weight (incl. packaging) of the concerned product (kg)}}{\text{Total weight (incl. packaging) of the reference product (kg)}}$$

Installation stage:

$$f_{inst} = \frac{\text{Weight of packaging of the concerned product (kg)}}{\text{Weight of packaging of the reference product (kg)}}$$

Use stage:

$$f_{use} = \frac{\text{Power of the concerned product (W)}}{\text{Power of the reference product (W)}}$$

End of life stage:

$$f_{eol} = \frac{\text{Total weight (excl. packaging) of the concerned product (kg)}}{\text{Total weight (excl. packaging) of the reference product (kg)}}$$

The required extrapolation coefficients at the product level are listed in the following table.

Table 15: Extrapolation coefficients at the product level

Product code	Manufacturing stage	Distribution stage	Installation stage	Use stage	End of life stage
EI3208 – Reference product	1.00	1.00	1.00	1.00	1.00
EI3030	0.99	1.01	1.00	1.00	1.02
EI3016	0.98	0.97	1.00	1.00	0.96
EI3014	0.98	0.97	1.00	1.00	0.96
EI3018	0.98	0.97	1.00	1.00	0.96
EI30124	1.00	1.00	1.00	1.00	1.00

Weight breakdown of each product variant and other important properties are listed in the table below.

Table 16: Information about the product family

Product Code	Weight of structural/mechanical parts	Weight of electronics	Weight of product (excluding packaging)	Weight of packaging	Typical power consumption	Weight of product including packaging	Weight of battery
	kg	kg	kg	kg	kWh	kg	kWh
EI3208– Reference product	0.24	0.6	0.31	0.04	2.18	0.35	0,01
EI3030	0.23	0.07	0.32	0.04	2.18	0.36	0.01
EI3016	0.24	0.06	0.30	0.04	2.18	0.34	0.01
EI3014	0.24	0.06	0.30	0.04	2.18	0.34	0.01
EI3018	0.24	0.06	0.30	0.04	2.18	0.34	0.01
EI3024	0.24	0.06	0.31	0.04	2.18	0.35	0.01