

Environmental Product Declaration

In accordance with ISO14025 2006 and EN 50693

AUTEL MaxiCharger DH480



AUTEL[®]

Owner of the declaration:
Autel Digital Power Co., Ltd.

Product name:
MaxiCharger DH480

Declared unit:
1 pcs (936.39 kg)

Product category/PCR:
[PCR EPDItaly017-Charging Stations]

Program holder and publisher:
The Norwegian EPD foundation

Declaration number:
NEPD-11882-11833

Registration number:
NEPD-11882-11833

Issue date:
22.07.2025

Valid to:
22.07.2030

General information

Product:

MaxiCharger DH480

This EPD follows additional requirements for construction products considered as Electronic or Electric Equipment.

Program holder:

The Norwegian EPD Foundation
Post Box 5250 Majorstuen, 0303 Oslo, Norway
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E-mail: post@epd-norge.no

Declaration Number:

NEPD-11882-11833

This declaration is based on Product

Category Rules:

PCR EPDIItaly017 – Charging Stations

Statements:

The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer, life cycle assessment data and evidences.

Declared unit:

1 pcs MaxiCharger DH480 (936.39kg)

Verification:

Independent verification of the declaration and data, according to ISO14025:2010

internal external 

Arch. Lucas Pedro Berman (Senda - Environmental and Energy Consulting)

Independent verifier approved by EPD Norway

Owner of the declaration:

Autel Digital Power Co., Ltd.
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Manufacturer:

Rooms 101 and 501, Building 2, Huaxing Optoelectronics Industrial Park, Dongkeng Community, Fenghuang Street, Guangming District, Shenzhen City, Guangdong Province, China

Place of production:

Shenzhen, P.R. China

Management system:

ISO9001, ISO14001, ISO45001

Organisation no:

914403000789968219

Issue date:

22.07.2025

Valid to:

22.07.2030

Year of study:

2024.01-2024.12

Comparability:

EPD of construction products may not be able to compare if they do not comply with EN 15804 and are seen in a building context.

The EPD has been worked out by:

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Approved

Manager of EPD Norway

Product

Product description:

The new-generation MaxiCharger DH480 offers the one-stop intelligent charging network with cutting edge innovations powered by AI. Achieve scalable power output from 120kW to 480kW with one platform, with intelligent matrix scheduling and 40kW granularity for flexible power adjustments, enabling rapid upgrades and minimizing reinvestment. It provides a reliable performance with full-modular design, Eco-Cooling technology and site-level network hot backup. Intelligent vehicle-charger-cloud compatibility and charging curve prediction technology empower customers to maximize yield.

Product specification:

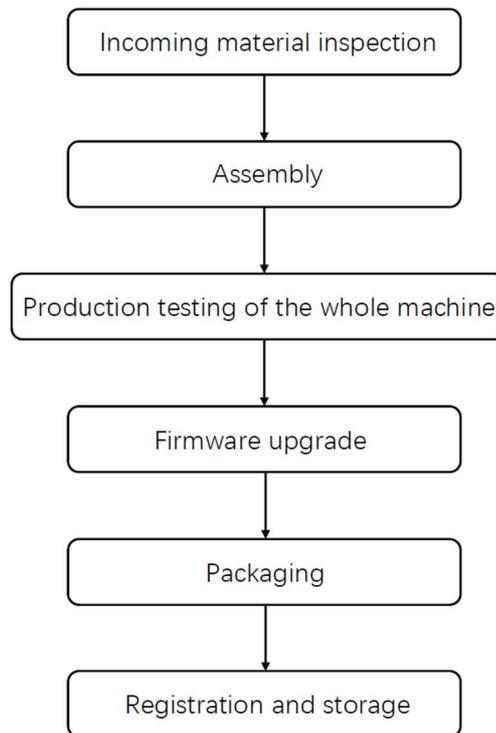
Materials compositions and technical data for the declared product are shown below.

Materials classes	IEC62474 Code	MaxiCharger DH480
Aluminium and its alloys	M-120	1.314%
Other ferrous alloys, non-stainless steels	M-119	1.977%
Copper and its alloys	M-121	7.042%
Plastics and rubber (PC, PA, PE, PET, PP, UP, EP, EPDM, Rubber)	M-204, M-208, M-201, M-209, M-202, M-301, M-302, M-324, M-323	1.591%
Silicone	M-321	0.000%
Glass	M-161	0.063%
Electronics	N/A	41.532%
PCBA	N/A	0.571%
Other inorganic materials	M-199	0.018%
Stainless steel	M-100	12.904%
Zinc and its alloys	M-124	32.982%
Ethylene vinyl acetate copolymers	M-212	0.005%
Other organic materials	M-399	0.002%

The product contains substances given by the REACH Candidate list or the Norwegian priority list that are less than 0,1 % by weight.

Description of production processes:

The production process for Autel products can be broadly described as follows: Each component will be processed at the supplier's place, and the factory's main process is to assemble the incoming materials into a complete machine, conduct production testing and verification on the assembled machine to ensure that the whole machine functions normally, and then upgrade it to the shipping firmware, and finally package it for shipment.



Technical data:

Series (brand name)	MaxiCharger DH480
Product weight	930kg
Output power	480kW
Output current	Air Cooling: 380A (Max. 500A) Liquid Cooling:500A (Max. 650A)
Nominal voltage	input:400Vac±10% output:150-1000Vdc
Type of operational conditions	Multiphase
Dimensions (H x W x D)	Spring CMS:2150*782*782mm Swing Arm CMS:2287*782*782mm
Operating temperature range	-35~55℃

Market:

This product is manufactured in China. Although the product was used in the Europe in 2024, it may actually be sold globally, so its downstream distribution, use, and disposal will involve global market scenarios.

Reference service life:

20 years

Type of EPD:

This declaration is a specific EPD.

LCA: Calculation rules

Declared unit:

According to PCR, a single charging station is adopted as the declared unit; the charging station is defined as an assembly of electric and electronic devices delivering electric power from the grid to an electric vehicle for charging purposes, during a reference service life of 20 years. Reference flow is one single unit of MaxiCharger DH480. A single MaxiCharger DH480 weighs approximately 936.39 kg. It is considered to be installed and operated in Netherlands in this study, but it can also be installed and operated worldwide.

Cut-off criteria:

According to EPD Italy Regulations and PCR EPDItaly007, the following flows and operations are cut-offed:

- Production, use and disposal of the packaging of components and semi-finished intermediates.
- Materials making up the charging station itself whose total mass does not exceed 2% of the total weight of the device.
- Material and energy flows related to the installation stage.
- Material and energy flows related to dismantling phase, whenever it is reasonable to assume that dismantling is performed by adopting manual tools (e.g. screwdrivers, hammers, etc.).
- Devices external to the product itself required for installation.
- Manufacture of equipment used in production, buildings or any other capital goods.
- The transportation of personnel to the plant.
- Transportation of personnel within the plant.
- Research and development activities.
- Long-term emissions.

This study adheres to the cut-off rules (<2%) specified in the PCR. Since the amount of water used in the production process is minimal and is not typically part of the core processing operations, water usage is cut-offed. The main processes at the factory include assembly, production testing, and validation, and waste generated during the product manufacturing process is less than 1%, so the waste generated during the production process is cut-offed. Besides, all available energy and material flow data within the system boundary have been included in the model. In cases where matching life cycle inventories were unavailable for specific flows, proxy data were applied based on conservative assumptions regarding environmental impacts.

Allocation:

The energy and resources usage per functional unit in the production stage of the product is calculated by dividing the annual energy or resource consumption by the total output of the company's product, in detail, the allocation of energy resources for plant processing use is calculated using the units of MaxiCharger DH480 produced to the total energy and resources consumption in the Autel plant during the reference period. That is, the physical allocation

method is used for allocation.

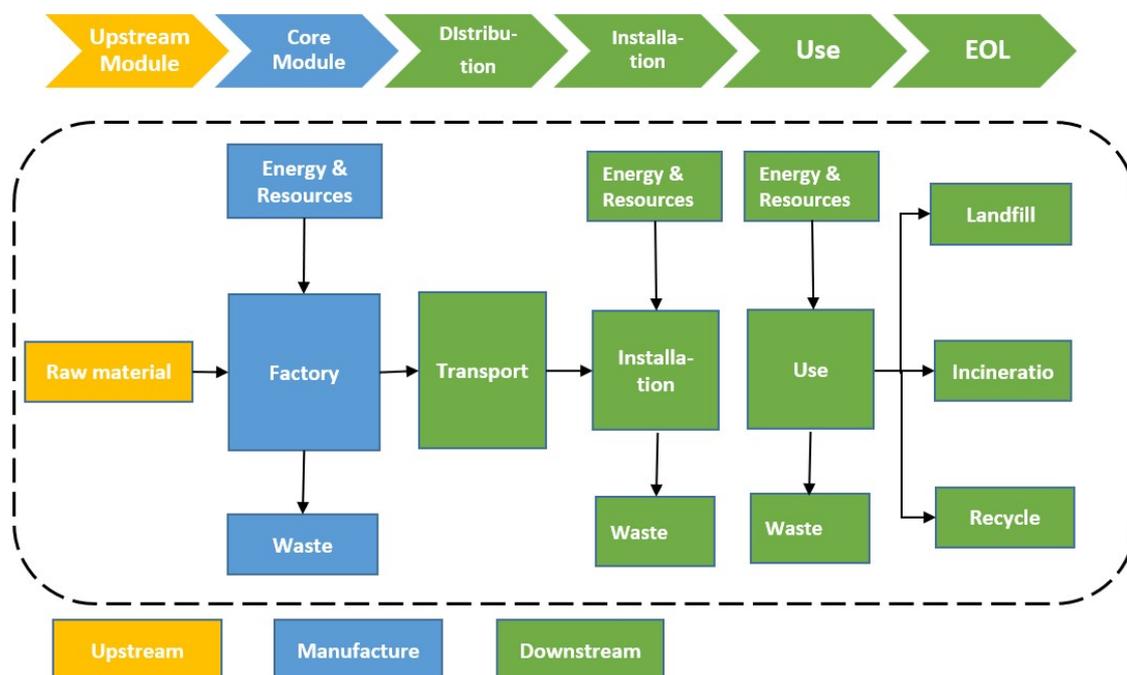
The principle of "modularity" is also followed in the study. In addition, the default distribution rule for the environmental impacts and benefits of reuse, recovery and/or recycling is based on the polluter pays principle (PPP), which means that the recovery or reuse beneficiary bears the environmental impacts and benefits associated with the recovery or reuse treatment, and the original product manufacturer does not have to bear this part of the impact burden. It also does not participate in the sharing of benefits (environmental impact of the production of the same product avoided by recycling and reuse).

Data quality:

Primary data (such as materials or energy flows that enter and leave the production system) is from Autel manufacturing facilities for the period spanning from Jan. 2024 to Dec. 2024 (annual average). Generic data related to the life cycle impacts of the material or energy flows that enter and leave the production system is sourced from Ecoinvent 3.11 database.

System boundary:

The system boundaries include the following processes classified in life cycle phases according to EN 50693:2019 (Manufacturing, Distribution, Installation, Use and maintenance, End of life) and the Regulations of the EPD Italy (Upstream, Core, Downstream) , from cradle to grave.



LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

Transport from production place to assembly/user (A4)

Market	Domestic transportation distance(truck)	Sea/Air freight distance	International transportation distance(truck)	Transport mode
Netherlands	30km	8900km	1000km	Freight by aircraft
United Kingdom	30km	9450km	1000km	Freight by aircraft
France	30km	9554km	1000km	Freight by aircraft
Netherlands	30km	8900km	1000km	Freight by aircraft
Netherlands	50km	19550km	1000km	Freight by ship

Type	Capacity utilisation (incl. return) %	Type of vehicle	Usage per Functional unit(ton•km)	Fuel/Energy consumption	value (l/tkm)
boat	75	container ship	9742.992	Heavy fuel oil	0.025
aircraft	70	belly-freight, long haul	14359.334	Diesel	0.45
truck	36.7	16-32 metric ton, EURO5	1057.127	Diesel	0.366

Assembly (A5)

	Unit	Value
Auxiliary	kg	-
Water consumption	m ³	-
Electricity consumption	kWh	-
Other energy carriers	MJ	-
Material loss	kg	-
Output materials from waste treatment	kg	80.27
Dust in the air	kg	-

In the installation stage, the energy use is negligible since the installation process is mainly done manually. According to the product category rules (PCR), only the waste disposal of packaging materials (scrap steel, scrap cardboard, scrap wood, plastic etc.) is considered in this stage. The transport distance from the disposal site to the waste treatment facility is assumed to be 50 km. According to EN50693: 2019, it is assumed that 80% of scrap steel is recycled. Based on relevant literature (see Appendix), 58% of waste cardboard and 50% of waste wood are recycled, while the remaining waste is treated according to the average disposal methods outlined in the Ecoinvent dataset. The recycling process includes sorting and compacting (after which any further processing is considered to be the end of the waste status and should be assigned to the subsequent product system).

Use (B1)

There are no material or energy inputs, nor emissions during the use phase (B1).

Maintenance (B2)/Repair (B3)

No maintenance and repair are required during the service life of the product.

Replacement (B4)/Refurbishment (B5)

It is assumed that the charging station itself does not require replacement and refurbishment during its RSL.

Operational energy (B6) and water consumption (B7)

	Unit	Value
Water consumption	m3	-
Electricity consumption	kWh	4204800
Other energy carriers	MJ	-
Power output of equipment	KW	-

The following two formulas are used to calculate the amount of electricity consumed during the product's service life:

$$E_{\text{use}}[\text{kWh}] = \frac{P_{\text{use}} * 8760 * RSL}{1000}$$

where: (P_{use} is the power consumed by the charging station; RSL is the service life of the product, assumed to be 20 years; 8760 is the number of hours in a year; 1000 is the conversion factor that allows the energy consumed in kWh over the product's service life to be expressed.)

Product	Operating hours per year(hour)	Power consumed by the charging station (P_{use} , W)	Electricity consumption (kWh)
MaxiCharger DH480	8760	24000	4204800

End of Life (C1, C3, C4)

	Unit	Value
Hazardous waste disposed	kg	-
Collected as mixed waste treatment	kg	394.41
Reuse	kg	-
Recycling	kg	344.95
Incineration	kg	45.62
To landfill	kg	151.40

For Decommissioning stage (C1) stage, the end-of-life stages begin with the deconstruction and demolition from the installation site, and then they are transferred for recycling and disposal. Usually, charging stations are manually dismantled, for this reason, the impact of the dismantling phase was considered negligible.

For Waste processing (C3) and Waste disposal (C4) stage, the product is dismantled into components and then sorted for further processing. The charging station processing and disposal stage involves removing valuable materials, metal scraps. According to EN50693 standards, in this study, 80% of metals (steel, Other ferrous metals) can be recycled, and 20% will be disposed by landfill. 70% of Aluminum can be recycled and 30% will be disposed with incineration. 60% of copper can be recycled and the rest of 40% will be disposed with incineration. 60% of other non-ferrous metals can be recycled and the rest of 40% will be disposed by landfill. Recycling includes sorting and pressing (any process after this is after its end-of waste state and shall be attributed to subsequent product system), In addition to the recyclable metals mentioned above, the remaining waste will be treated according to the average disposal methods outlined in the Ecoinvent database.

Transport to waste processing (C2)

Type	Capacity utilization (incl.return) %	Type of vehicle	Distance (km)	Fuel/Energy consumption	value (l/tkm)
Truck	36.7	16-32 metric ton, EURO5	50	Diesel	0.036

For Waste transport (C2) stage, it is assumed the average distance from installation site to local waste disposal department is 50 km, and the transport vehicle is a 16-32 ton Euro5 truck.

LCA: Results

The results are shown per declared unit (1 single unit of charging station). The LCA results have been calculated using the LCA software SimaPro 10.2.

System boundaries (X=included, MID=module not declared, MIR=module not relevant)

Product stage			Assembly stage		Use stage							End of life stage				Beyond system boundaries
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	MND

Core environmental impact indicators

Indicator	Unit	A1	A2	A3	A4	A5	B1-B5	B6	B7	C1	C2	C3	C4
		Upstream		Core	Downstream								
		Manufacturing		Distribution	Installation	Use & Maintenance			End-of-Life				
GWP-total	kg CO2 eq.	1.54E+04			1.26E+04	-7.92E+01	0.00E+00	2.91E+06	0.00E+00	0.00E+00	9.47E+00	1.15E+01	4.58E+02
GWP-fossil	kg CO2 eq.	1.52E+04			1.26E+04	6.10E+00	0.00E+00	2.89E+06	0.00E+00	0.00E+00	9.47E+00	1.15E+01	4.58E+02
GWP-biogenic	kg CO2 eq.	2.26E+02			9.81E-01	-8.53E+01	0.00E+00	5.25E+03	0.00E+00	0.00E+00	2.36E-03	4.93E-02	1.61E-01
GWP-luluc	kg CO2 eq.	2.96E+01			1.02E+00	6.44E-03	0.00E+00	6.18E+03	0.00E+00	0.00E+00	4.24E-03	1.52E-02	8.50E-02
ODP	kg CFC-11 eq.	3.19E-04			3.81E-06	3.00E-09	0.00E+00	3.19E-03	0.00E+00	0.00E+00	5.18E-09	1.24E-08	2.44E-07
AP	mol H+ eq.	2.27E+02			5.64E+01	3.77E-02	0.00E+00	1.54E+04	0.00E+00	0.00E+00	3.23E-02	1.02E-01	3.17E-01
EP-freshwater	kg P eq.	2.26E+01			1.90E-01	1.24E-03	0.00E+00	1.47E+03	0.00E+00	0.00E+00	1.04E-03	5.28E-03	1.62E-02
EP-marine	kg N eq.	2.53E+01			2.27E+01	4.54E-02	0.00E+00	2.95E+03	0.00E+00	0.00E+00	1.02E-02	2.34E-02	1.22E-01
EP-terrestrial	mol N eq.	2.85E+02			2.48E+02	1.67E-01	0.00E+00	2.97E+04	0.00E+00	0.00E+00	1.11E-01	2.61E-01	1.12E+00
POCP	kg NMVOC eq.	9.76E+01			7.88E+01	7.11E-02	0.00E+00	8.83E+03	0.00E+00	0.00E+00	4.38E-02	7.84E-02	3.21E-01
ADP minerals&metals*	kg Sb eq.	5.14E+00			3.00E-03	1.58E-05	0.00E+00	1.76E+01	0.00E+00	0.00E+00	3.10E-05	5.28E-04	1.15E-04
ADP-fossil*	MJ	1.11E+05			3.08E+03	1.08E+01	0.00E+00	2.62E+07	0.00E+00	0.00E+00	1.68E+01	4.22E+01	2.36E+02
WDP*	m3	5.84E+03			2.25E+02	3.17E-01	0.00E+00	4.18E+05	0.00E+00	0.00E+00	6.08E-01	1.52E+00	6.01E+01
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption												

Additional environmental impact indicators

Indicator	Unit	A1	A2	A3	A4	A5	B1-B5	B6	B7	C1	C2	C3	C4
		Upstream		Core	Downstream								
		Manufacturing		Distribution	Installation	Use & Maintenance			End-of-Life				
PM	disease inc.	1.17E-03			1.31E-04	1.01E-05	0.00E+00	1.35E-01	0.00E+00	0.00E+00	7.32E-07	1.51E-06	3.10E-06
IRP	kBq U-235 eq	1.61E+03			4.23E+01	1.13E-01	0.00E+00	4.08E+05	0.00E+00	0.00E+00	1.06E-01	4.34E-01	3.28E+00
ETP-fw	CTUe	5.47E+05			7.21E+03	1.59E+02	0.00E+00	7.70E+06	0.00E+00	0.00E+00	2.41E+01	6.65E+01	7.00E+03
HTP-C	CTUh	2.41E-05			7.94E-07	4.73E-08	0.00E+00	4.78E-04	0.00E+00	0.00E+00	1.58E-09	7.43E-09	6.03E-08
HTP-nC	CTUh	1.58E-03			1.26E-04	4.39E-06	0.00E+00	2.75E-02	0.00E+00	0.00E+00	8.10E-08	4.70E-07	7.12E-06
SQP	Pt	1.46E+05			1.14E+04	5.34E+01	0.00E+00	6.80E+06	0.00E+00	0.00E+00	7.70E+01	2.06E+02	2.85E+02
Acronyms	PM= Particulate matter emissions; IRP= Ionising radiation, human health; ETP-fw =Ecotoxicity (freshwater); HTP-c= Human toxicity, cancer effects: HTP-nc= Human toxicity, non-cancer effects; SQP= Land use related impacts / soil quality												

Resource use

Indicator	Unit	A1	A2	A3	A4	A5	B1-B5	B6	B7	C1	C2	C3	C4
		Upstream		Core	Downstream								
		Manufacturing		Distribution	Installation	Use & Maintenance			End-of-Life				
PERE	MJ	2.88E+04			5.71E+02	1.27E+03	0.00E+00	6.14E+06	0.00E+00	0.00E+00	1.82E+00	1.70E+01	4.77E+01
PERM	MJ	1.27E+03			0.00E+00	-1.27E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	3.01E+04			5.71E+02	1.76E+00	0.00E+00	6.14E+06	0.00E+00	0.00E+00	1.82E+00	1.70E+01	4.77E+01
PENRE	MJ	1.10E+05			3.08E+03	7.87E+02	0.00E+00	2.62E+07	0.00E+00	0.00E+00	1.68E+01	4.23E+01	2.37E+02
PENRM	MJ	7.77E+02			0.00E+00	-7.77E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.11E+05			3.08E+03	1.08E+01	0.00E+00	2.62E+07	0.00E+00	0.00E+00	1.68E+01	4.23E+01	2.37E+02
SM	kg	0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	1.79E+02			7.56E+00	1.14E-02	0.00E+00	1.74E+04	0.00E+00	0.00E+00	1.79E-02	4.94E-02	2.21E+00
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; W = Use of net fresh water												

End of life - Waste

Indicator	Unit	A1	A2	A3	A4	A5	B1-B5	B6	B7	C1	C2	C3	C4
		Upstream		Core	Downstream								
		Manufacturing		Distribution	Installation	Use & Maintenance			End-of-Life				
HWD	kg	7.42E+00			1.16E+00	3.72E-04	0.00E+00	1.19E+02	0.00E+00	0.00E+00	8.83E-04	5.27E-02	4.86E-03
NHWD	kg	1.21E+03			2.01E+02	3.12E+00	0.00E+00	1.23E+05	0.00E+00	0.00E+00	6.07E+00	4.90E+00	5.86E+02
RWD	kg	4.01E-01			1.03E-02	2.79E-05	0.00E+00	9.96E+01	0.00E+00	0.00E+00	2.59E-05	1.07E-04	8.06E-04
Acronyms	HWD=Hazardous waste disposed; NHWD=Non-hazardous waste disposed; RWD=Radioactive waste disposed												

End of life – output flow

Indicator	Unit	A1	A2	A3	A4	A5	B1-B5	B6	B7	C1	C2	C3	C4
		Upstream		Core	Downstream								
		Manufacturing		Distribution	Installation	Use & Maintenance			End-of-Life				
CRU	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	4.15E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E+02	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EET	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acronyms	CRU= Components for re-use; MFR= Material for recycling; MER= Materials for energy recovery; EEE= Exported energy, electricity; EET= Exported energy, thermal												

Information describing the biogenic carbon content at the factory gate

Biogenic carbon content	Unit	MaxiCharger DH480
Biogenic carbon content in product	kgC	-
Biogenic carbon content in the accompanying packaging	kgC	3.64E+01

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂

Biogenic carbon content (packaging materials)	Weight	Unit	Biogenic material (kg C)	Biogenic Carbon Content (kgC)
Wood	43.000	kg/DU	0.5 kg C/kg	2.15E+01
Paper board	33.066	kg/DU	0.45 kg C/kg	1.49E+01
Total				3.64E+01

Additional requirements

Greenhouse gas emission from the use of electricity in the manufacturing phase

In the context of China, a market-based approach is not applicable due to the absence of a Guarantee of Origin system. Therefore, a location-based approach is employed to assess the environmental impact of electricity in this EPD. The following table presents the applied electricity for the manufacturing process (A3).

Electricity mix	Data source	GWP _{total} [kg CO ₂ -eq/kWh]
Electricity, medium voltage {CN-CSG} market for electricity, medium voltage Cut-off, S	Ecoinvent3.11	0.59

Additional environmental impact indicators required for construction products

In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

Indicator	Unit	A1	A2	A3	A4	A5	B1-B5	B6	B7	C1	C2	C3	C4
		Upstream		Core	Downstream								
		Manufacturing		Distribution	Installation	Use & Maintenance			End-of-Life				
GWP-IOBC	kg CO ₂ -eq	1.53E+04		1.26E+04	5.42E+01	0.00E+00	2.91E+06	0.00E+00	0.00E+00	9.47E+00	1.15E+01	4.58E+02	
Acronyms	GWP-IOBC Global warming potential calculated according to the principle of instantaneous oxidation.												

Indoor environment

This is not relevant in this study.

Carbon footprint

The carbon footprint (per DU) for is 2.93×10^6 kg CO₂eq.

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