

ENVIRONMENTAL PRODUCT DECLARATION

CommScope® Equipment Racks



At CommScope, we believe that corporate responsibility and sustainability means making decisions that have a positive long-term impact on our people, planet, and bottom line. Our company-wide sustainability mission is to enable faster, smarter, and more sustainable solutions while demonstrating the utmost respect for our human and natural resources. Innovative technology, intelligent engineering, and energy efficient design help us accomplish our mission and achieve our goals.

Sustainability is a central part of the solutions and practices we create to serve the ever-increasing need for connectivity, and for us, sustainability starts at home with our own people and products. Through responsible business practices, partnerships and technology innovation, we are advancing our industry while creating a more sustainable future.

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025, EN 15804 + A2. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	ASTM INTERNATIONAL 100 BARR HARBOR DRIVE WEST CONSHOHOCKEN, PA 19428
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	General Program Instructions. Version 8.0. April 29, 2020
MANUFACTURER NAME AND ADDRESS	CommScope, Inc. 3642 E US Highway 70, Claremont, North Carolina 28610
DECLARATION NUMBER	EPD 1120
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	CommScope® Equipment Racks Functional Unit = one piece of equipment rack used to carry and organize IT equipment such as servers and switches a reference lifetime of 20 years
REFERENCE PCR AND VERSION NUMBER	PEP ecopassport Program: PSR specific rule for Electrical switchgear and control gear solutions (PSR-0005-ed3.1-EN-2023 12 08)
DESCRIPTION OF PRODUCT APPLICATION/USE	CommScope® cable management - Equipment Racks
PRODUCT RSL DESCRIPTION (IF APPL.)	20 Years
MARKETS OF APPLICABILITY	Global
DATE OF ISSUE	February 13, 2026
PERIOD OF VALIDITY	5 Years
EPD TYPE	Product Specific
RANGE OF DATASET VARIABILITY	N/A
EPD SCOPE	Cradle-to-Grave
YEAR(S) OF REPORTED PRIMARY DATA	2024
LCA SOFTWARE DATABASE(S) & VERSION NUMBER	SimaPro 10.2.0.3 & ecoinvent 3.11 & USLCI+
LCIA METHODOLOGY & VERSION NUMBER	TRACI 2.2, CML- IA Baseline 3.11 and EN15804+A2 (adapted) 1.03
The sub-category PCR review was conducted by:	
This declaration was independently verified in accordance with ISO 14025: 2006. The "PEP ecopassport Program PCR for electrical, electronic and HVAC-R products", v4.0, 2021 based on EN 15804:2012 + A2:2019, serves as the core PCR. <input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL	Timothy S Brooke ASTM International
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	
This life cycle assessment was independently verified in accordance with ISO 14044 and reference PCR by:	Thomas P. Gloria, Ph. D. Industrial Ecology Consultants

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance using EPD information shall consider all relevant information modules over the full life cycle of the products within the building. This PCR allows EPD comparability only when the same functional requirements between products are ensured and the requirements of EN 15804:2012+A2:2019 are met. It should be noted that different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

General Information

Description of Company/Organization

CommScope (NASDAQ: COMM) helps design, build and manage wired and wireless networks around the world. Corporate responsibility and sustainability drive us to make decisions that benefit people, society, the planet and our bottom line. We enable faster, smarter and more sustainable solutions while respecting human and natural resources. Innovative technology, intelligent engineering and energy-efficient design help us meet our goals. CommScope builds sustainable networks that make our customers more agile, simultaneously helping to preserve the natural ecosystems from which we source components and materials.

Product Description

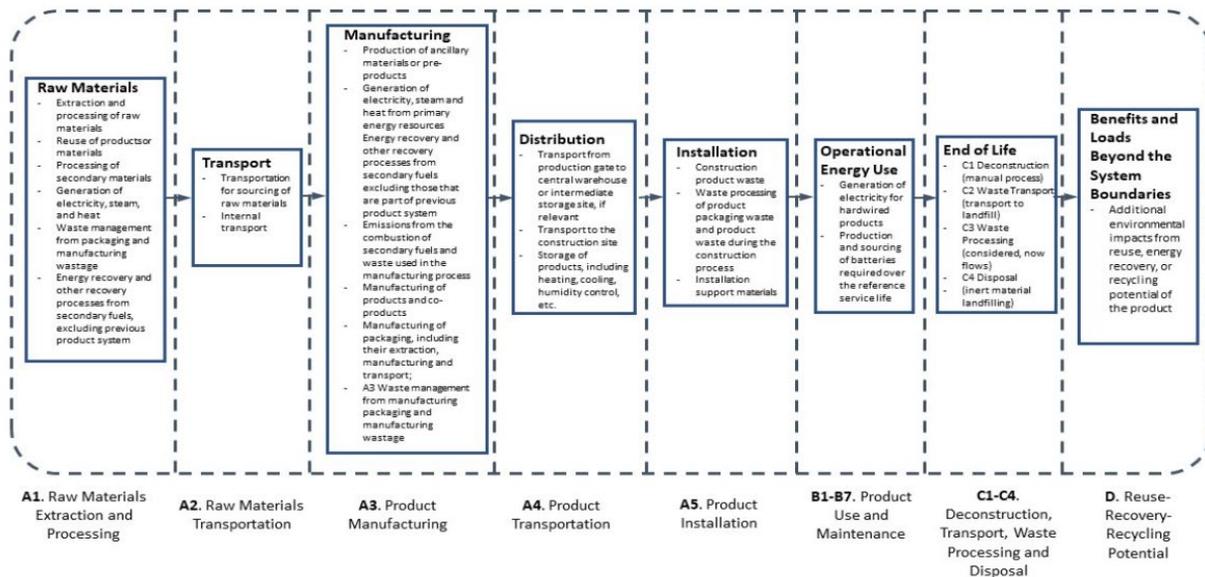
Equipment rack is a standard frame designed to house and organize technological equipment such as servers, switches, routers, patch panels, and other networking devices.

Product Type: Equipment racks are cable management products

Product Characteristic: Equipment racks have better airflow, which helps improve equipment cooling. They are designed for ease of access to the equipment, with the front and rear often left open or covered with removable panels for cabling and maintenance.

This EPD covers 11 specific product IDs in the CommScope Equipment Racks product series.

Flow Diagram



Manufacturer Specific EPD

This product-specific EPD was developed based on the cradle-to-grave (modules A1-D) Life Cycle Assessment. The EPD accounts for raw material extraction and processing, transport, product manufacturing, distribution, installation, use, maintenance, disposal, and potential benefits and loads following the end-of-life disposal. Manufacturing data were gathered directly from CommScope contract manufacture LYNAM INDUSTRIES INC. An impact assessment was completed for the CommScope Equipment racks. This EPD covers one product series consisting of 11 product IDs. An impact assessment was completed for each product in the series and the product with the maximum weight is reported. Other product IDs are represented through the TRACI product result table and can be independently calculated.

Application

Equipment rack is a standard frame designed to house and organize technological equipment such as servers, switches, routers, patch panels, and other networking devices.

Material Composition

The primary product components and/or materials must be indicated as a percentage mass to enable the user of the EPD to understand the composition of the product in delivery status.

The composition of the reference CommScope Equipment rack is as follows:

Product ID: 760175729	
Material type	Mass percentage
Polyethylene	2.00 %
Polyester Resin	3.00 %
Low alloyed steel	5.00 %
Unalloyed steel	95.00 %
Total	100%

Properties of Declared Product as Shipped

CommScope Equipment racks are delivered as a complete unit, inclusive of all installation materials and instructions.

Methodological Framework

Functional Unit

The declaration refers to the functional unit of 1 piece of Equipment rack product.

Name	Value	Unit
Declared Unit	1	piece
Maximum Mass	3.48E+01	kg

System Boundary

This is a cradle to grave Environmental Product Declaration. The following life cycle phases were considered:

Life Cycle Stage	Life Cycle Module	Module	Included (X)/ Not Included
Product Stage	Raw Material Supply	A1	X
	Transport	A2	X
	Manufacturing	A3	X
Construction Process Stage	Transport from gate to the site	A4	X
	Construction/Installation process	A5	X
Use Stage	Use	B1	X
	Maintenance	B2	X
	Repair	B3	X
	Replacement	B4	X
	Refurbishment	B5	X
	Operational energy use	B6	X
	Operational water use	B7	X
End of Life Stage*	Deconstruction/ demolition	C1	X
	Transport	C2	X
	Waste processing	C3	X
	Disposal	C4	X
Benefits and Loads Beyond the System Boundaries	Reuse-Recovery-Recycling potential	D	X

*This includes provision of all materials, products and energy, packaging processing and its transport, as well as waste processing up to the end-of waste state or disposal of final residues.

Notes:

- There are no activities in the Modules B1-B7 and C1 as the values are “0”
- Module D is reported but excluded from the total life cycle results as it falls outside the system boundary

Reference Service Life

The reference service life of an Equipment rack is 20 years.

Allocation

Allocation was determined on a per piece basis for the system.

Cut-off Criteria

Processes whose total contribution to the final result, with respect to their mass and in relation to all considered impact categories, is less than 1% can be neglected. The sum of the neglected processes may not exceed 5% by mass of the considered impact categories. For that a documented assumption is admissible.

For Hazardous Substances the following requirements apply:

- The Life Cycle Inventory (LCI) of hazardous substances will be included, if the inventory is available.
- If the LCI for a hazardous substance is not available, the substance will appear as an input in the LCI of the product, if its mass represents more than 0.1% of the product composition.
- If the LCI of a hazardous substance is approximated by modeling another substance, documentation will be provided.

This EPD is in compliance with the cut-off criteria. No processes were neglected or excluded. Capital items for the production processes (machine, buildings, etc.) were not taken into consideration.

Data Sources

Primary data were collected for every process in the product system under the control of CommScope. Secondary data from the ecoinvent 3.11 & USLCI+ databases were utilized when necessary. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the product category.

Data Quality

The data sources used are complete and representative of global systems in terms of the geographic and technological coverage and are a recent vintage (i.e. less than ten years old). The data used for primary data are based on direct information sources of the manufacturers. Secondary data sets were used for raw materials extraction and processing, end of life, transportation, and energy production flows. Wherever secondary data is used, the study adopts critically reviewed data for consistency, precision, and reproducibility to limit uncertainty.

Period Under Review

The period under review is the full calendar year of 2024.

Treatment of Biogenic Carbon

The uptake and release of biogenic carbon throughout the product life cycle follows EN15804+A2 Section 6.4.4.

Comparability and Benchmarking

A comparison or an evaluation of EPD data is only possible if all data sets to be compared were created according to EN 15804 + A2 and the building context, respectively the product-specific characteristics of performance, are taken into account. Environmental declarations from different programs may not be

comparable. Full conformance with the PCR allows for EPD comparability only when all stages a product's life cycle have been considered. However, variations and deviations are possible.

Units

The LCA results within this EPD are reported in SI units.

Additional Environmental Information

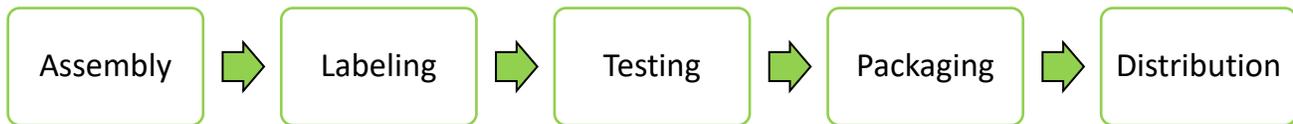
Background Data

For life cycle modeling of the considered products, SimaPro- LCA software tool, developed by PRé-Sustainability, is used. The ecoinvent database contains consistent and documented datasets which are available online. To ensure comparability of results in the LCA, data from the ecoinvent database were used for materials, energy, transportation, and waste treatment.

Manufacturing

CommScope’s Racks are produced with metal components, paper labels and other joining and mounting hardware.

Sheet metal is laser cut and then processed through Turrets and Press brakes for punching and bending operations. Then they are tapped and finally powder coated. The metal components are then assembled with mounting hardware where necessary, and additional hardware is kitted and provided along with the components for mounting at customer end. The kit is finally checked and then packaged in plastic wrap and then in carboards to be finally packed on pallets. Once packaged, Racks are shipped to customers.



Packaging

The packaging for this product series is composed of four types of packaging materials: plastics, metal, paper and cardboard which is used for individual product packaging.

Quantity % by Weight	
Material type	Maximum
Plastics	80.91%
Metal	8.30%
Paper	0.83%
Cardboard	9.96%
Total	100.00%

Transformation

Transport to Building Site (A4)		
Name	Value	Unit
Fuel type	Diesel, compliant with EURO5	
Transport mode	100% by truck	
Transport distance (to distribution center)	402.5	km
Transport distance (to end customers)	1,932	km
Capacity Utilization	85	%
Weight of one piece maximum weight rack with packaging transported	40.815	kg

Product Installation

CommScope Equipment racks are distributed through and installed by trained installation technicians adhering to local/national standards and requirements. Installation accounts for the energy consumption, material wastage, and support materials use during the installation process, as well as waste treatment of packaging materials. No installation scrap was assumed since each product is designed to be an installed product in its entirety. The product is designed for manual installation therefore no power equipment is used so electricity usage can be neglected.

Installation into the building (A5)		
Name	Max	Unit
Auxiliary materials	-	kg
Water consumption	-	m ³
Other resources	-	kg
Electricity consumption	-	kWh
Other energy carriers	-	MJ
Product loss per functional unit	0.00E+00	kg
Waste materials at construction site	0.00E+00	kg
Output substance (recycle)	0.00E+00	kg
Output substance (landfill)	0.00E+00	kg
Output substance (incineration)	0.00E+00	kg
Packaging waste (recycle)	0.00E+00	kg
Packaging waste (Landfill)	0.00E+00	kg
Packaging waste (incineration)	0.00E+00	kg
Packaging waste (Incineration with no energy recovery)	5.23E+00	kg
Direct emissions to ambient air*, soil, and water	1.48E+01	kg CO ₂
VOC emissions	-	kg

*CO2 emissions to air from disposal of packaging

Reference Service Life		
Name	Value	Unit
Reference Service Life	20	years
Declared product properties (at the gate) and finishes, etc.	-	
Design application parameters (if instructed by the manufacturer), including the references to the appropriate practices and application codes	-	
An assumed quality of work, when installed in accordance with the manufacturer's instructions	-	
Outdoor environment, (for outdoor applications), e.g. weathering, pollutants, UV and wind exposure, building orientation, shading, temperature	-	
Indoor environment (for indoor applications), e.g. temperature, moisture, chemical exposure	-	
Usage conditions, e.g. frequency of use, mechanical exposure	-	
Maintenance e.g. required frequency, type and quality and replacement of components	-	

Product Use

No cleaning, maintenance, repair, replacement or refurbishment is required. There is no operational energy or water use.

Operational Energy Use (B6)		
Name	Value	Unit
Ancillary materials specified by material	-	kg
Net freshwater consumption	-	m ³
Electricity consumption	-	kWh
Power output of equipment	-	kWh
Characteristic performance	-	-
Further assumptions for scenario development	-	-

Disposal

The product can be manually disassembled for disposal. The product is disposed through waste incineration with energy recovery or landfilled, in accordance with the PCR.

End of Life (C2-C4)		
Name	Max	Unit
Collected separately	0.00E+00	kg
Collected as mixed construction waste	3.48E+01	kg
Reuse	0.00E+00	kg
Recycling	2.64E+01	kg
Landfilling	7.48E+00	kg
Incineration with energy recovery	8.70E-01	kg
Energy conversion	25.00	%
Removals of biogenic carbon	-	kg

Re-use Phase

Re-use of the product is not common.

Re-Use, recovery, And/Or Recycling Potential (D)		
Name	Max	Unit
Net energy benefit from energy recovery from waste treatment declared as exported energy in C3 (R>0.6)	0.00	MJ
Net energy benefit from thermal energy due to treatment of waste declared as exported energy in C4 (R<0.6)	0.00	MJ
Net energy benefit from material flow declared in C3 for energy recovery	0.07	MJ
Process and conversion efficiencies	-	
Further assumptions for scenario development (e.g. further processing technologies, assumptions on correction factors);	-	

LCA Results - Maximum Impact

Results shown below were calculated using the TRACI 2.2 Methodology. The results for TRACI, CML, and EN15804+A2 results are shown below for the maximum weight product 760175729 in the Equipment rack product series. For all methodologies below, module D is not included in the Total, as it is outside the product system boundary.

Results shown below were calculated using the TRACI 2.2 Methodology.

TRACI 2.2 - Impact Assessment									
Impact Category	Unit	A1-A3	A4	A5	C2	C3	C4	D	Total
Global warming potential	kg CO2 eq	1.15E+02	9.41E+00	1.49E+01	3.44E+00	2.50E+00	8.00E-02	-4.85E+01	1.45E+02
Ozone depletion	kg CFC-11 eq	3.61E-07	1.51E-08	8.27E-11	5.51E-09	1.49E-09	1.41E-09	-1.82E-07	3.85E-07
Acidification	kg SO2 eq	3.93E-01	3.95E-02	1.59E-02	1.44E-02	1.26E-03	3.07E-04	-1.59E-01	4.64E-01
Marine eutrophication	kg N eq	4.80E-02	1.11E-02	2.85E-03	4.04E-03	4.12E-04	1.10E-04	-2.22E-02	6.65E-02
Freshwater eutrophication	kg P eq	1.39E-02	6.10E-07	1.14E-05	2.23E-07	2.23E-05	1.00E-03	-9.33E-03	1.49E-02
Smog	kg O3 eq	5.73E+00	1.37E+00	4.00E-01	4.99E-01	4.15E-02	8.23E-03	-2.44E+00	8.04E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using the CML-IA baseline V3.11 / EU25 methodology

CML-IA baseline - Impact Assessment									
Impact Category	Unit	A1-A3	A4	A5	C2	C3	C4	D	Total
Global warming (GWP100a)	kg CO2 eq	1.16E+02	9.41E+00	1.50E+01	3.43E+00	2.49E+00	8.37E-02	-4.88E+01	1.46E+02
Abiotic depletion	kg Sb eq	8.54E-05	1.80E-08	9.87E-11	6.57E-09	1.42E-07	7.24E-08	-4.63E-05	8.56E-05
Abiotic depletion (fossil fuels)	MJ	8.64E+02	1.74E+00	9.53E-03	6.35E-01	8.93E-01	1.17E+00	-4.71E+02	8.68E+02
Photochemical oxidation	kg C2H4 eq	7.49E-02	5.04E-04	1.23E-02	1.84E-04	1.01E-05	2.03E-05	-2.09E-02	8.80E-02
Acidification	kg SO2 eq	3.80E-01	2.72E-02	8.60E-03	9.94E-03	9.32E-04	2.51E-04	-1.50E-01	4.27E-01
Eutrophication	kg PO4--- eq	1.30E-01	7.02E-03	2.73E-03	2.56E-03	6.62E-04	7.08E-03	-7.91E-02	1.50E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	2.88E-07	8.32E-09	4.56E-11	3.04E-09	1.19E-09	1.07E-09	-1.50E-07	3.02E-07

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using EN 15804 + A2 (adapted) V1.03 Methodology.

EN 15804 + A2 (adapted) - Impact Assessment									
Parameter - EN 15804 + A2	Unit	A1-A3	A4	A5	C2	C3	C4	D	Total
Acidification	mol H+ eq	4.63E-01	4.23E-02	1.21E-02	1.55E-02	1.35E-03	3.39E-04	-1.86E-01	5.35E-01
Climate change	kg CO2 eq	1.15E+02	9.38E+00	1.64E+01	3.43E+00	2.49E+00	8.60E-02	-4.88E+01	1.47E+02
Climate change - Biogenic	kg CO2 eq	-1.46E+00	6.02E-03	1.46E+00	2.85E-03	1.67E-04	3.84E-05	0.00E+00	9.07E-03
Climate change - Fossil	kg CO2 eq	1.16E+02	9.41E+00	1.49E+01	3.44E+00	2.49E+00	8.60E-02	-4.90E+01	1.46E+02
Climate change - Land use and LU change	kg CO2 eq	3.17E-02	0.00E+00	0.00E+00	0.00E+00	1.81E-05	2.76E-05	-2.05E-02	3.17E-02
Ecotoxicity, freshwater	CTUe	5.86E+02	3.77E+01	1.12E+02	1.38E+01	3.55E+00	1.99E-01	-1.67E+02	7.53E+02
Ecotoxicity, freshwater - inorganics	CTUe	5.78E+02	3.73E+01	1.11E+02	1.36E+01	3.54E+00	1.93E-01	-1.63E+02	7.44E+02
Ecotoxicity, freshwater - organics	CTUe	8.35E+00	3.52E-01	1.49E+00	1.28E-01	4.81E-03	6.07E-03	-4.42E+00	1.03E+01
Particulate matter	disease inc.	8.00E-06	1.92E-07	2.54E-08	7.02E-08	4.69E-09	7.80E-09	-4.69E-06	8.30E-06
Eutrophication, marine	kg N eq	9.17E-02	2.08E-02	5.35E-03	7.58E-03	1.01E-03	2.10E-04	-4.16E-02	1.27E-01
Eutrophication, freshwater	kg P eq	2.41E-02	9.09E-07	1.27E-05	3.32E-07	8.78E-06	4.30E-06	-1.74E-02	2.41E-02
Eutrophication, terrestrial	mol N eq	9.57E-01	2.28E-01	5.86E-02	8.31E-02	7.21E-03	1.42E-03	-4.45E-01	1.33E+00
Human toxicity, cancer	CTUh	1.12E-07	2.98E-09	2.48E-08	1.09E-09	1.52E-10	9.35E-12	-6.10E-08	1.41E-07
Human toxicity, cancer - inorganics	CTUh	3.77E-08	2.24E-09	1.68E-08	8.19E-10	1.31E-10	3.40E-12	-1.18E-08	5.77E-08
Human toxicity, cancer - organics	CTUh	7.39E-08	7.36E-10	7.98E-09	2.69E-10	2.12E-11	5.95E-12	-4.92E-08	8.29E-08
Human toxicity, non-cancer	CTUh	4.79E-06	4.71E-07	2.10E-06	1.72E-07	5.70E-09	4.00E-10	-3.54E-07	7.54E-06
Human toxicity, non-cancer - inorganics	CTUh	4.74E-06	4.63E-07	2.10E-06	1.69E-07	5.68E-09	3.28E-10	-3.45E-07	7.48E-06
Human toxicity, non-cancer - organics	CTUh	5.37E-08	7.89E-09	2.20E-09	2.88E-09	2.54E-11	7.19E-11	-9.53E-09	6.68E-08
Ionising radiation	kBq U-235 eq	4.10E+09	4.52E+07	2.48E+05	1.65E+07	8.40E-04	7.23E-04	-4.19E+06	4.16E+09
Land use	Pt	2.42E+02	8.24E-01	4.52E-03	3.01E-01	1.35E-01	2.35E+00	-1.22E+02	2.46E+02
Ozone depletion	kg CFC11 eq	3.20E-07	8.52E-09	4.67E-11	3.11E-09	1.42E-09	1.34E-09	-1.64E-07	3.34E-07
Photochemical ozone formation	kg NMVOC eq	3.49E-01	5.65E-02	3.35E-02	2.06E-02	1.76E-03	5.22E-04	-1.52E-01	4.62E-01

Resource use, fossils	MJ	9.44E+02	1.74E+00	9.53E-03	6.35E-01	9.07E-01	1.18E+00	-4.86E+02	9.48E+02
Resource use, minerals and metals	kg Sb eq	8.53E-05	1.80E-08	9.87E-11	6.57E-09	1.42E-07	7.23E-08	-4.62E-05	8.55E-05
Water use	m3 depriv.	1.28E+01	2.36E-01	1.30E-03	8.63E-02	6.65E-02	-7.74E-03	-1.02E+01	1.32E+01

***The Potential Human Exposure Efficiency Relative to U235 (IRP) is the same as the Ionising Radiation category*

***The Abiotic depletion potential for non-fossil resources (ADP minerals & metals) is the same as Resource use, minerals and metals*

***The Abiotic depletion potential for fossil resources (ADP fossils) is the same as Resource use, fossils*

**Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study*

Results below contain the resource use throughout the life cycle of the product.

EN 15804 + A2 (adapted): Resource Use - Impact Assessment									
Impact Category	Unit	A1-A3	A4	A5	C2	C3	C4	D	Total
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	3.82E+01	3.77E-04	2.06E-06	1.37E-04	1.91E-02	1.14E-02	-1.73E+01	3.82E+01
Use of renewable primary energy resources used as raw materials	MJ	2.12E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E+02
Total use of renewable primary energy resources	MJ	2.50E+02	3.77E-04	2.06E-06	1.37E-04	1.91E-02	1.14E-02	-1.73E+01	2.50E+02
Use of non-renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	9.99E+02	1.88E+00	1.03E-02	6.85E-01	9.95E-01	1.25E+00	-5.16E+02	1.00E+03
Use of non-renewable primary energy resources used as raw materials	MJ	5.73E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E+01
Total use of non-renewable primary energy resources	MJ	1.06E+03	1.88E+00	1.03E-02	6.85E-01	9.95E-01	1.25E+00	-5.16E+02	1.06E+03
Use of secondary material	kg	8.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.99E-03
Use of renewable secondary fuels	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
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	0.00E+00	0.00E+00
Net use of fresh water	m3	1.30E+01	2.37E-01	1.30E-03	8.64E-02	6.60E-02	-7.72E-03	-1.04E+01	1.34E+01

**Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study*

Results below contain the output flows and wastes throughout the life cycle of the product.

EN 15804 + A2 (adapted): Waste and output flows - Impact Assessment									
Impact Category	Unit	A1-A3	A4	A5	C2	C3	C4	D	Total
Hazardous waste disposed	kg	6.09E-03	0.00E+00	0.00E+00	0.00E+00	7.43E-06	7.57E-06	-4.47E-03	6.11E-03
Non-hazardous waste disposed	kg	5.16E+00	1.43E-07	7.84E-10	5.221E-08	2.22E-02	7.48E+00	-3.21E+00	1.27E+01
Radioactive waste disposed	kg	3.67E-04	0.00E+00	0.00E+00	0.00E+00	2.11E-07	1.76E-07	-1.76E-04	3.67E-04
Components for re-use	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
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E+01	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.69E-01	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.31E+01	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results below contain direct greenhouse gas emissions and removals throughout the life cycle of the product.

EN 15804 + A2 (adapted): Greenhouse gas emissions and removals - Impact Assessment									
Impact Category	Units	A1 - A3	A4	A5	C2	C3	C4	D	Total
Biogenic Carbon Removal from Product	kg CO2	0.00E+00							
Biogenic Carbon Emissions from Product	kg CO2	0.00E+00							
Biogenic Carbon Removal from Packaging	kg CO2	8.34E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E-01
Biogenic Carbon Emissions from Packaging	kg CO2	0.00E+00	0.00E+00	8.34E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.34E-01
Biogenic Carbon Emissions from Combustion of Waste from Renewable Sources Used in Production Process	kg CO2	0.00E+00							
Calcination Carbon Emissions	kg CO2	0.00E+00							
Carbonation Carbon Removal	kg CO2	0.00E+00							

Carbon Emissions from Combustion of Waste from Non-renewable Sources Used in Production Process	kg CO2	0.00E+00							
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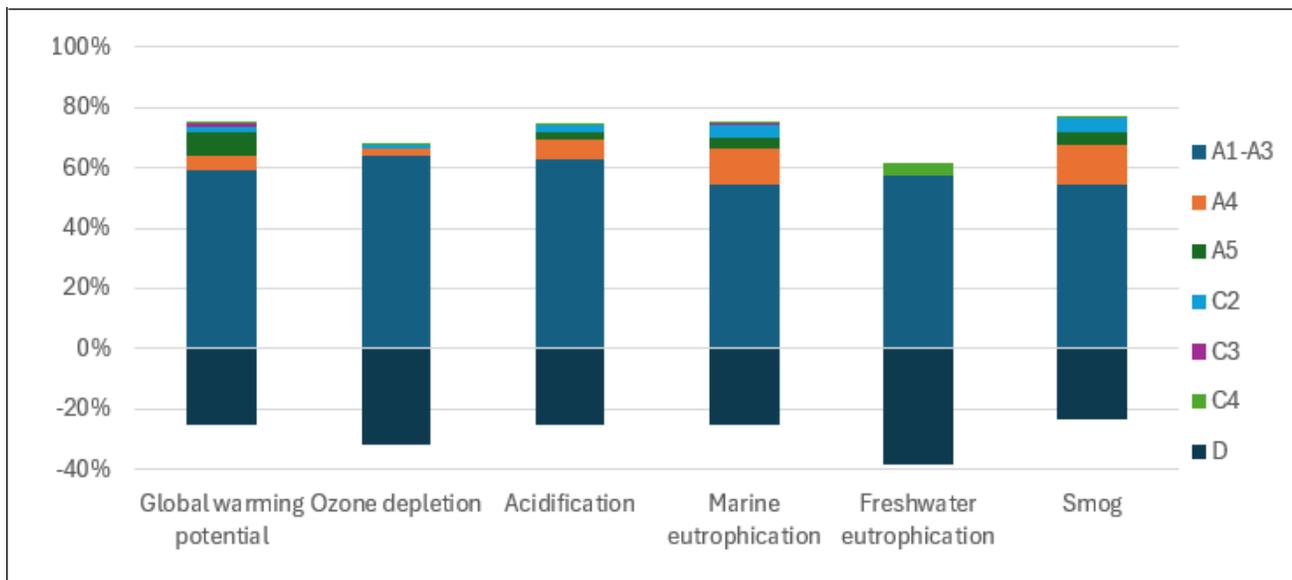
*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

LCA Interpretation – Maximum Impact

The production life cycle stage (A1-A3) dominates the impacts across all impact categories. This is due to the upstream production of materials used in the product, along with the electricity use in the manufacturing of the product. Significant impact is also shown by the A4 distribution stage and A5 installation stage in most of the impact categories. The reuse, recovery, and recycling potential (D) stage is a negative value and accounts for the benefit of energy recovery during incineration, and the benefit from recycling material at the end-of-life for a product.

These results underscore that efforts to reduce the overall environmental impacts of this product should focus primarily on improvements in the early product stages (A1-A3), particularly in sourcing and processing raw materials.

Below figure shows the TRACI 2.2 impacts of equipment rack 760175729 with the maximum weight in the product series.



Product Results Tables

Full impact results in TRACI, CML and EN15804 + A2 are reported above on the maximum weight product. Since there are multiple products in this equipment rack series covered in this EPD, the TRACI impact assessment was completed for each product in the series as shown in the table below, the unit is per piece of the product. The maximum weight product is listed in the end of this table. This approach ensures consistent and transparent calculation of environmental impacts across all products in the group. The total result includes the GWP value of A1-A3 plus the stages A4, A5, C2, C3, C4. Module D is not included in the Total result, as it is outside the product system boundary.

A1 - A3						
Product ID	Global warming potential	Ozone depletion	Acidification	Marine eutrophication	Freshwater eutrophication	Smog
760082479	5.24E+01	3.14E-07	1.85E-01	2.32E-02	3.49E-03	3.73E+00
760082487	4.76E+01	2.64E-07	1.75E-01	2.02E-02	1.98E-03	3.61E+00
760082495	4.89E+01	2.70E-07	1.80E-01	2.07E-02	2.00E-03	3.72E+00
760082503	5.48E+01	2.96E-07	2.05E-01	2.31E-02	2.05E-03	4.25E+00
760082511	7.37E+01	3.87E-07	2.81E-01	3.07E-02	2.25E-03	5.86E+00
760082529	1.18E+02	6.16E-07	4.45E-01	4.84E-02	2.75E-03	9.32E+00
760082560	1.25E+02	6.53E-07	4.75E-01	5.14E-02	2.83E-03	9.96E+00
760090134	5.93E+01	2.07E-07	2.60E-01	2.70E-02	7.36E-03	5.08E+00
760175703	1.18E+02	4.13E-07	5.15E-01	5.37E-02	1.47E-02	1.01E+01
760090118	4.38E+01	1.65E-07	1.88E-01	2.01E-02	5.58E-03	3.66E+00
760175729	1.15E+02	3.61E-07	3.93E-01	4.80E-02	1.39E-02	5.73E+00

Product ID	A4	A5	C2	C3	C4	D	Total
760082479	4.99E+00	2.98E+01	9.47E-01	6.89E-01	5.39E-02	-1.55E+01	8.89E+01
760082487	3.85E+00	1.49E+01	1.06E+00	7.69E-01	6.01E-02	-1.72E+01	6.82E+01
760082495	3.94E+00	1.49E+01	1.09E+00	7.96E-01	6.23E-02	-1.78E+01	6.97E+01
760082503	4.26E+00	1.49E+01	1.23E+00	8.96E-01	7.01E-02	-2.01E+01	7.62E+01
760082511	5.41E+00	1.49E+01	1.72E+00	1.25E+00	9.80E-02	-2.81E+01	9.71E+01
760082529	8.34E+00	1.49E+01	2.98E+00	2.17E+00	1.70E-01	-4.86E+01	1.47E+02
760082560	8.81E+00	1.49E+01	3.18E+00	2.31E+00	1.81E-01	-5.19E+01	1.54E+02
760090134	5.15E+00	1.49E+01	1.61E+00	1.17E+00	3.75E-02	-2.28E+01	8.22E+01
760175703	1.03E+01	2.98E+01	3.22E+00	2.34E+00	7.50E-02	-4.55E+01	1.64E+02
760090118	4.00E+00	1.49E+01	1.12E+00	8.13E-01	2.60E-02	-1.58E+01	6.47E+01
760175729	9.41E+00	1.49E+01	3.44E+00	2.50E+00	8.00E-02	-4.85E+01	1.45E+02

Additional Environmental Information

Environmental and Health During Manufacturing

CommScope values employees' health, safety and well-being. To this end, we maintain a robust company-wide environment, health and safety (EHS) management system. This is an integrated program based on the requirements of the International Standards of ISO45001 and ISO14001. To support this integrated EHS management system, CommScope utilizes a web-based platform, the BSI Entropy™ tool. This tool supports the management of our EHS processes and operations at the corporate and facility level. All EHS management system records (policies, procedures, method statements, health and safety risk assessments, environmental aspect/impact assessments, legal requirements, permits, training, internal and external audits, incidents and implemented CAPA, KPIs, and other records related to EHS) are maintained and managed in Entropy. In addition, 90% of CommScope manufacturing facilities are certified according to the ISO14001 and ISO45001 standards. Our vision and commitments are detailed in our [EHS Policy](#).

CommScope understands the need to address the environmental impacts of its products and services. CommScope engages product development teams in designing innovative and more sustainable solutions across a product's life cycle - from design and manufacturing to product use and end of life.

CommScope is committed to demonstrating a high standard of global product compliance practices. Through this commitment, we actively monitor global environmental trends and emerging regulatory requirements that may affect our products, operations, supply chain, and customer base. We are committed to be compliant with all applicable environmental product related legal and other requirements. To achieve this, we have a global organization comprising environmental specialists, engineers, and product compliance experts who are constantly ensuring our compliance status is maintained. We manage our compliance using a cross-functional approach with our engineers, designers, quality organization, supply chain organization, and production.

CommScope is committed to upholding the human rights of its employees. To ensure our employees are treated with dignity and respect, we follow a well-established Code of Ethics and Business Conduct and Labor Policy that align with recognized standards and guidelines from the International Labor Organization, the United Nations Global Compact, the UN Universal Declaration of Human Rights, SA8000 and applicable laws.

Environmental and Health During Installation

There is no harmful emissive potential. No damage to health or impairment is expected under normal use corresponding to the intended use of the product.

Extraordinary Effects

Fire

No extraordinary effects to the environment can be anticipated during exposure to fire.

Water

Contains no substances that have any impact on water in case of flood.

Mechanical Destruction

No danger to the environment can be anticipated during mechanical destruction.

Delayed Emissions

Global warming potential is calculated using the TRACI 2.2, CML- IA Baseline 3.11 and EN15804+A2 (adapted) 1.03 impact assessment methodologies. Delayed emissions are not considered.

Environmental Activities and Certifications

Our Sustainability Report details CommScope's efforts to operate the business ethically and with integrity; protect the environment; maintain the health, safety and well-being of our workforce; and support the communities in which we operate. To learn more, view our comprehensive Sustainability Report at <https://www.commscope.com/corporate-responsibility-and-sustainability/>.

CommScope maintains a variety of certifications based on the widely accepted industry standards:

- Quality Management System certification (ISO9001/TL9000)
- Environmental Management System certification (ISO14001)
- Health and Safety Management System certification (ISO45001)

These certificates can be downloaded from our company website:

<https://www.commscope.com/corporate-responsibility-and-sustainability/philosophy/#certifications>

Product sustainability certifications including EPDs and Health Product Declarations (HPDs) can be downloaded from our company website:

<https://www.commscope.com/corporate-responsibility-and-sustainability/product-sustainability/certifications/>

Further Information

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Contact Information

Study Commissioner



For more information, visit our website at
<https://www.commscope.com/>

- Contact customer support for product and technical questions at <https://www.commscope.com/contact-us/>
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- Contact Corporate Responsibility & Sustainability team for sustainability questions at sustainability@commscope.com

LCA Practitioner

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