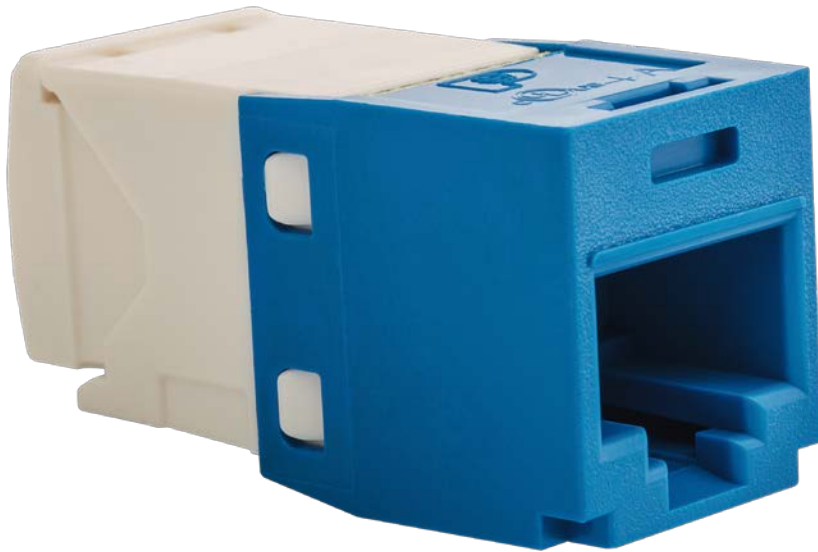


ENVIRONMENTAL PRODUCT DECLARATION

PANDUIT RJ45 JACK MODULES

CATEGORY 5E, CATEGORY 6, CATEGORY 6A



At Panduit, we're serious about sustainability.

Everyone's talking about sustainability these days. Companies are making huge changes in the way they do business to meet the demands for energy efficiency, meet environmental standards and exceed international benchmarks.

At Panduit, sustainability drives our business practices. We are committed to providing you with the most cost-efficient and environmentally sound solutions available. Because sustainable business practices have always been at the core of what we do, it's a natural progression for us to create [award-winning](#) solutions that put sustainable business at the foundation of your infrastructure, too.

We walk the talk.

Our world headquarters, a [LEED Gold Certified building](#), is a testament to our commitment to design and implement healthy, energy efficient, and sustainable business environments. Through our experience and expertise, we can help you build an infrastructure that can contribute toward your projects' LEED certification.



ENVIRONMENTAL PRODUCT DECLARATION



infrastructure for a connected world

RJ45 Jack Modules

All listed variations

According to ISO 14025

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025 and ISO 21930. 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.



PROGRAM OPERATOR	UL Environment	
DECLARATION HOLDER	Panduit	
DECLARATION NUMBER	4787339353.103.1	
DECLARED PRODUCT	RJ45 Jack Modules	
REFERENCE PCR	PCR for EPDs: Construction Products and Construction Services	
DATE OF ISSUE	September 26, 2016	
PERIOD OF VALIDITY	5 years	
CONTENTS OF THE DECLARATION	Product definition and information about building physics Information about basic material and the material's origin Description of the product's manufacture Indication of product processing Information about the in-use conditions Life cycle assessment results Testing results and verifications	
The PCR review was conducted by:	International EPD System	
	PCR Review Panel	
This declaration was independently verified in accordance with ISO 14025 by Underwriters Laboratories <input checked="" type="checkbox"/> INTERNAL <input type="checkbox"/> EXTERNAL		
	Wade Stout, ULE EPM	
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:		
	Thomas P. Gloria, Industrial Ecology Consultants	

ENVIRONMENTAL PRODUCT DECLARATION



infrastructure for a connected world

RJ45 Jack Modules

All listed variations

According to ISO 14025

Product Related Information

Specification of the Manufacturing Company

Panduit is the leading global provider of innovative electrical and network infrastructure solutions. Founded in 1955, the company is headquartered in a LEED Gold Certified building, and has more than 5,000 employees and operations in 112 countries. Panduit's end-to-end network infrastructure solution delivers best-in-class network performance with superior quality, operational efficiency and easy installation. Panduit RJ45 jack modules are manufactured in Orland Park, Illinois, and Costa Rica; both sites hold an ISO14001 certificate for their environmental management systems.

Product Description

RJ45 jacks facilitate the modular connection of a patch cord to a permanent channel. In this declaration, Mini-Com® and Keystone footprints are covered. All jacks are 100% performance tested, individually serialized, and come with a headroom guarantee. The following jack modules are included in this declaration:

Panduit Mini-Com® Unshielded Category 5e TG Style Jack Module, Part number: CJ5E88TG**

Panduit Mini-Com® Unshielded Category 6 TG Style Jack Module, Part number: CJ688TG**

Panduit Mini-Com® Unshielded Category 6A TG Style Jack Module, Part number: CJ6X88TG**

Panduit Mini-Com® Shielded Category 5e TG Style Jack Module, Part number: CJS5E88TG**Y

Panduit Mini-Com® Shielded Category 6 TG Style Jack Module, Part number: CJS688TG**Y

Panduit Mini-Com® Shielded Category 6A TG Style Jack Module, Part number: CJS6X88TG**Y

Panduit Mini-Com® Unshielded Category 5e TG Style 28/30 AWG Jack Module, Part number: CJT5E88TG**

Panduit Mini-Com® Unshielded Category 6 TG Style 28/30 AWG Jack Module, Part number: CJT688TG**

Panduit Mini-Com® Unshielded Category 6A TG Style 28/30 AWG Jack Module, Part number: CJT6X88TG**

Panduit Mini-Com® Unshielded Category 5e TG Style Right Angle Jack Module, Part number: CJR5E88TG**

Panduit Mini-Com® Unshielded Category 6 TG Style Right Angle Jack Module, Part number: CJR688TG**

Panduit Mini-Com® Unshielded Category 6A TG Style Right Angle Jack Module, Part number: CJR6X88TG**

Panduit Mini-Com® Unshielded Category 5e TP Style Jack Module, Part number: CJ5E88T**

Panduit Mini-Com® Unshielded Category 6 TP Style Jack Module, Part number: CJ688TP**

Panduit NetKey® Unshielded Category 5e Punchdown Jack Module, Part number: NKP5E88M**



ENVIRONMENTAL PRODUCT DECLARATION



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RJ45 Jack Modules

All listed variations

According to ISO 14025

Panduit NetKey® Unshielded Category 6 Punchdown Jack Module, Part number: NK688M**

Panduit NetKey® Unshielded Category 6A Punchdown Jack Module, Part number: NK6X88M**

Panduit NetKey® Unshielded Category 6 TP Style Jack Module, Part number: NK6TM**

** denotes color code

Additional Product Specifications

Additional product specifications are displayed below in Table 1.

Attribute	Category 5e TG Style Jack Module	Category 6 TG Style Jack Module	Category 6A TG Style Jack Module	Category 5e Shielded Jack Module	Category 6 Shielded Jack Module	Category 6A Shielded Jack Module	Category 5e TG Style 28/30 AWG Jack Module	Category 6 TG Style 28/30 AWG Jack Module	Category 6A TG Style 28/30 AWG Jack Module
Termination Style	TG Style	TG Style	TG Style	TG Style	TG Style	TG Style	TG Style	TG Style	TG Style
Module Type	Mini-Com	Mini-Com	Mini-Com	Mini-Com	Mini-Com	Mini-Com	Mini-Com	Mini-Com	Mini-Com
Operating Temperature	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F
Storage Temperature	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F
RoHS Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Application	Unshielded	Unshielded	Unshielded	Shielded	Shielded	Shielded	Unshielded	Unshielded	Unshielded
Attribute	Category 5e Right Angle Jack Module	Category 6 Right Angle Jack Module	Category 6A Right Angle Jack Module	NetKey Category 5e Punchdown Jack Module	NetKey Category 6 Punchdown Jack Module	Category 5e TP Style Jack Module	Category 6 TP style Jack Module	NetKey Category 6 TP Style Jack Module	NetKey Category 6A Punchdown Jack Module
Termination Style	TG Style	TG Style	TG Style	Punchdown	Punchdown	TP Style	TP Style	TP Style	Punchdown
Module Type	Mini-Com	Mini-Com	Mini-Com	Keystone	Keystone	Mini-Com	Mini-Com	Keystone	Keystone
Operating Temperature	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F	-14°F to 149°F
Storage Temperature	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F
RoHS Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Application	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded	Unshielded

Table 1: Product Specification

Declared Unit

The declared unit in this declaration is one RJ45 jack module. The period under consideration is the 2015 calendar year. Products in the scope of this study are considered cradle-to-gate with end of life options, as specified by the Construction Products and Construction Services Product Category Rule.



ENVIRONMENTAL PRODUCT DECLARATION



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RJ45 Jack Modules

All listed variations

According to ISO 14025

Content of Materials and Chemical Substances

RJ45 jacks do not contain hazardous or dangerous substances. Table 1 details the material content of each RJ45 variation.

Material	Category 5e TG Style Jack Module	Category 6 TG Style Jack Module	Category 6A TG Style Jack Module	Category 5e Shielded Jack Module	Category 6 Shielded Jack Module	Category 6A Shielded Jack Module	Category 5e TG Style 28/30 AWG Jack Module	Category 6 TG Style 28/30 AWG Jack Module	Category 6A TG Style 28/30 AWG Jack Module
Polycarbonate	44%	44%	41%	13%	13%	12%	44%	44%	42%
ABS	39%	39%	31%	15%	15%	12%	38%	38%	30%
PBT	0%	0%	8%	0%	0%	4%	0%	0%	8%
Metal Contacts	10%	10%	9%	68%	68%	67%	10%	10%	9%
Printed Circuit Board	8%	8%	8%	4%	4%	4%	8%	8%	8%
Aluminum	0%	0%	3%	0%	0%	0%	0%	0%	3%
Others	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%
Material	Category 5e Right Angle Jack Module	Category 6 Right Angle Jack Module	Category 6A Right Angle Jack Module	NetKey Category 5e Punchdown Jack Module	NetKey Category 6 Punchdown Jack Module	Category 5e TP Style Jack Module	Category 6 TP style Jack Module	NetKey Category 6 TP Style Jack Module	NetKey Category 6A Punchdown Jack Module
Polycarbonate	47%	47%	47%	35%	35%	42%	43%	41%	34%
ABS	36%	36%	36%	45%	45%	40%	41%	42%	43%
PBT	0%	0%	0%	0%	0%	0%	0%	0%	0%
Metal Contacts	9%	9%	9%	11%	11%	9%	9%	9%	10%
Printed Circuit Board	8%	8%	8%	9%	9%	8%	7%	8%	9%
Aluminum	0%	0%	3%	0%	0%	0%	0%	0%	4%
Others	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%

Table 2: Material Composition





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RJ45 Jack Modules

All listed variations

According to ISO 14025

Environmental Performance Related Information

Life Cycle Stages Assessed

This project considers the life cycle activities from resource extraction through installation and end-of-life effects. The use phase is excluded from this study. The boundary covers raw material acquisition, manufacturing, marketing and waste disposal as seen in Table 2. This EPD is cradle-to-gate with options, and as such no reference service life is stated.

Product			Construction Installation		Use							End of Life				Benefits of Loads Beyond the System Boundary		
Raw Material Extraction and Processing	Transport	Manufacturing	Transport	Construction/Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water Use	De-Construction/Demolition	Transport	Waste Processing	Disposal	Reuse	Recovery	Recycling
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D
X	X	X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	X	MND	X	MND	MND	MND

X = Module Declared

MND – Module Not Declared

Table 3: System Boundary

Product Stage (A1-A3)

The product stage includes the extraction and processing of all raw materials and intermediate products used in the manufacturing process, including packaging materials. Raw materials are sourced via truck or ship to either the Orland Park, IL or Costa Rica manufacturing locations. Manufacturing inputs include the direct inputs to the RJ45 manufacturing process such as electricity, compressed air, water, and plating chemicals. Facility overhead and production of capital equipment are excluded from the system boundary.

Construction Stage (A4-A5)

The construction stage accounts for outbound distribution to the customer, and the installation of the product. RJ45 jack modules are distributed globally by truck and ocean freight. A jack module manufactured at the Orland Park facility is shipped an average of 1,300 miles by truck and 2,329 miles by sea, while a jack module manufactured at the Costa Rica facility is shipped an average of 1,735 miles by truck and 3,913 miles by sea. These distances are based on detailed product distribution data.

The installation of a RJ45 jack is a passive process consuming no energy or materials; therefore, the installation module only accounts for the disposal of the packaging materials.



ENVIRONMENTAL PRODUCT DECLARATION

PANDUIT®

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RJ45 Jack Modules

All listed variations

According to ISO 14025

Use (B1-B7)

All modules within the use stage were excluded from the scope of this study and are not declared. As such, no reference service life is stated for this study.

End of Life (C1-C4)

It is assumed that deconstruction of the installed jack is manual and requires no energy or material inputs. For module C2, a distance of 50 miles (80 km) was assumed to transport the jacks to the waste processing facility. The study assumes the product is not recycled and is disposed as the average US municipal solid waste disposition in Module C4. The average US disposition includes 80% landfill and 20% incineration, according to EPA WARM models.

Potential Environmental Impact - TRACI

The environmental impacts were assessed throughout the life cycle of the jack modules as defined above, per RJ45 jack module. The environmental impacts were analyzed using TRACI 2.1, and these results are summarized below in Tables 4 – 6.

ENVIRONMENTAL PRODUCT DECLARATION



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RJ45 Jack Modules

All listed variations

According to ISO 14025

TRACI 2.1 Impact Category	Category 5e TP Style Jack Module					Category 5e TG Style Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.9E-03	4.1E-05	3.5E-05	2.7E+00	2.6E+00	2.0E-03	4.1E-05	3.5E-05	2.7E+00
Ozone Depletion (kg CFC-11 eq)	1.9E-08	7.2E-14	1.5E-11	1.3E-15	2.3E-08	1.9E-08	7.5E-14	1.5E-11	1.3E-15	2.3E-08
Acidification (kg SO ₂ eq)	1.6E-02	1.9E-05	3.0E-07	2.1E-07	1.1E-03	1.6E-02	1.9E-05	3.0E-07	2.1E-07	1.1E-03
Eutrophication (kg N eq)	6.8E-03	1.0E-06	5.2E-08	1.2E-08	1.6E-03	6.8E-03	1.1E-06	5.2E-08	1.2E-08	1.6E-03
Smog (kg O ₃ eq)	4.0E-01	5.3E-04	8.3E-06	5.7E-06	2.8E-02	4.0E-01	5.5E-04	8.3E-06	5.7E-06	2.8E-02
Resource Depletion, Fossil Fuels (MJ)	4.7E+00	3.6E-03	1.4E-04	6.6E-05	2.3E-01	4.7E+00	3.8E-03	1.4E-04	6.6E-05	2.3E-01
TRACI 2.1 Impact Category	Category 6 TG Style Jack Module					Category 6 TP Style Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	5.3E-03	4.1E-05	6.6E-05	1.9E+00	2.7E+00	3.8E-03	4.1E-05	6.6E-05	1.9E+00
Ozone Depletion (kg CFC-11 eq)	2.4E-08	2.0E-13	1.5E-11	2.5E-15	4.9E-08	2.4E-08	1.4E-13	1.5E-11	2.5E-15	4.9E-08
Acidification (kg SO ₂ eq)	2.0E-02	5.6E-05	3.0E-07	3.9E-07	1.9E-03	2.0E-02	3.7E-05	3.0E-07	4.0E-07	1.9E-03
Eutrophication (kg N eq)	2.3E-02	3.1E-06	5.2E-08	2.2E-08	1.3E-03	2.3E-02	2.0E-06	5.2E-08	2.2E-08	1.3E-03
Smog (kg O ₃ eq)	4.1E-01	1.6E-03	8.3E-06	1.1E-05	5.2E-02	4.2E-01	1.0E-03	8.3E-06	1.1E-05	5.2E-02
Resource Depletion, Fossil Fuels (MJ)	4.7E+00	1.0E-02	1.4E-04	1.3E-04	5.0E-01	4.8E+00	7.2E-03	1.4E-04	1.3E-04	5.0E-01
TRACI 2.1 Impact Category	Category 6A TG Style Jack Module					Category 5e Right Angle Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.7E+00	3.8E-03	4.1E-05	6.7E-05	1.9E+00	2.5E+00	2.6E-03	4.1E-05	3.2E-05	2.6E+00
Ozone Depletion (kg CFC-11 eq)	2.4E-08	1.4E-13	1.5E-11	2.5E-15	5.0E-08	1.9E-08	9.9E-14	1.5E-11	1.2E-15	2.2E-08
Acidification (kg SO ₂ eq)	2.0E-02	3.7E-05	3.0E-07	4.0E-07	1.9E-03	1.6E-02	2.7E-05	3.0E-07	1.9E-07	1.1E-03
Eutrophication (kg N eq)	2.3E-02	2.0E-06	5.2E-08	2.2E-08	1.3E-03	6.8E-03	1.5E-06	5.2E-08	1.1E-08	1.6E-03
Smog (kg O ₃ eq)	4.2E-01	1.1E-03	8.3E-06	1.1E-05	5.3E-02	3.9E-01	7.8E-04	8.3E-06	5.3E-06	2.7E-02
Resource Depletion, Fossil Fuels (MJ)	4.8E+00	7.2E-03	1.4E-04	1.3E-04	5.0E-01	4.7E+00	5.0E-03	1.4E-04	6.2E-05	2.2E-01

Table 4: TRACI Results per Declared Unit – Part 1



ENVIRONMENTAL PRODUCT DECLARATION



infrastructure for a connected world

RJ45 Jack Modules

All listed variations

According to ISO 14025

TRACI 2.1 Impact Category	Category 6 Right Angle Style Jack Module					Category 6A Right Angle Style Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.8E-03	4.1E-05	3.2E-05	2.6E+00	2.6E+00	1.9E-03	4.1E-05	3.4E-05	2.6E+00
Ozone Depletion (kg CFC-11 eq)	1.9E-08	7.0E-14	1.5E-11	1.2E-15	2.2E-08	2.0E-08	7.4E-14	1.5E-11	1.3E-15	2.4E-08
Acidification (kg SO ₂ eq)	1.6E-02	1.8E-05	3.0E-07	1.9E-07	1.1E-03	1.7E-02	1.9E-05	3.0E-07	2.0E-07	1.2E-03
Eutrophication (kg N eq)	6.8E-03	9.8E-07	5.2E-08	1.1E-08	1.6E-03	6.8E-03	1.0E-06	5.2E-08	1.1E-08	1.6E-03
Smog (kg O ₃ eq)	4.0E-01	5.1E-04	8.3E-06	5.3E-06	2.7E-02	4.0E-01	5.4E-04	8.3E-06	5.6E-06	2.9E-02
Resource Depletion, Fossil Fuels (MJ)	4.7E+00	3.5E-03	1.4E-04	6.2E-05	2.2E-01	4.7E+00	3.7E-03	1.4E-04	6.6E-05	2.4E-01
TRACI 2.1 Impact Category	Category 5e Shielded Jack Module					Category 6 Shielded Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.6E-03	4.1E-05	2.9E-05	2.2E+00	2.6E+00	1.8E-03	4.1E-05	3.1E-05	2.5E+00
Ozone Depletion (kg CFC-11 eq)	1.9E-08	6.3E-14	1.5E-11	1.1E-15	2.0E-08	1.9E-08	6.8E-14	1.5E-11	1.2E-15	2.1E-08
Acidification (kg SO ₂ eq)	1.6E-02	1.6E-05	3.0E-07	1.7E-07	9.8E-04	1.6E-02	1.8E-05	3.0E-07	1.9E-07	1.1E-03
Eutrophication (kg N eq)	6.8E-03	8.9E-07	5.2E-08	9.7E-09	1.4E-03	6.7E-03	9.6E-07	5.2E-08	1.0E-08	1.5E-03
Smog (kg O ₃ eq)	4.0E-01	4.6E-04	8.3E-06	4.7E-06	2.4E-02	4.0E-01	5.0E-04	8.3E-06	5.1E-06	2.7E-02
Resource Depletion, Fossil Fuels (MJ)	4.7E+00	3.1E-03	1.4E-04	5.6E-05	2.0E-01	4.7E+00	3.4E-03	1.4E-04	6.0E-05	2.2E-01
TRACI 2.1 Impact Category	Category 6A Shielded Jack Module					Category 5e TG Style 28/30 AWG Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.7E-03	4.1E-05	3.0E-05	2.1E+00	2.5E+00	2.3E-03	4.1E-05	2.9E-05	2.2E+00
Ozone Depletion (kg CFC-11 eq)	1.9E-08	6.5E-14	1.5E-11	1.1E-15	2.0E-08	1.9E-08	8.9E-14	1.5E-11	1.1E-15	2.0E-08
Acidification (kg SO ₂ eq)	1.7E-02	1.7E-05	3.0E-07	1.8E-07	9.6E-04	1.6E-02	2.5E-05	3.0E-07	1.7E-07	9.8E-04
Eutrophication (kg N eq)	6.8E-03	9.2E-07	5.2E-08	1.0E-08	1.3E-03	6.8E-03	1.3E-06	5.2E-08	9.7E-09	1.4E-03
Smog (kg O ₃ eq)	4.0E-01	4.8E-04	8.3E-06	4.9E-06	2.4E-02	3.9E-01	7.0E-04	8.3E-06	4.7E-06	2.4E-02
Resource Depletion, Fossil Fuels (MJ)	4.7E+00	3.3E-03	1.4E-04	5.8E-05	2.0E-01	4.7E+00	4.5E-03	1.4E-04	5.6E-05	2.0E-01

Table 5: TRACI Results per Declared Unit – Part 2



ENVIRONMENTAL PRODUCT DECLARATION



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RJ45 Jack Modules

All listed variations

According to ISO 14025

TRACI 2.1 Impact Category	Category 6 TG Style 28/30 AWG Jack Module					Category 6A TG Style 28/30 AWG Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.5E+00	2.5E-03	4.1E-05	3.1E-05	2.4E+00	2.5E+00	2.6E-03	4.1E-05	3.2E-05	2.5E+00
Ozone Depletion (kg CFC-11 eq)	1.9E-08	9.4E-14	1.5E-11	1.2E-15	2.1E-08	1.9E-08	9.8E-14	1.5E-11	1.2E-15	2.2E-08
Acidification (kg SO ₂ eq)	1.6E-02	2.6E-05	3.0E-07	1.8E-07	1.0E-03	1.6E-02	2.7E-05	3.0E-07	1.9E-07	1.1E-03
Eutrophication (kg N eq)	6.7E-03	1.4E-06	5.2E-08	1.0E-08	1.5E-03	6.8E-03	1.5E-06	5.2E-08	1.1E-08	1.5E-03
Smog (kg O ₃ eq)	3.9E-01	7.5E-04	8.3E-06	5.0E-06	2.6E-02	3.9E-01	7.8E-04	8.3E-06	5.2E-06	2.7E-02
Resource Depletion, Fossil Fuels (MJ)	4.7E+00	4.7E-03	1.4E-04	5.9E-05	2.1E-01	4.7E+00	4.9E-03	1.4E-04	6.1E-05	2.2E-01
TRACI 2.1 Impact Category	NetKey Category 6 Punched Jack Module					NetKey Category 6 TP Style Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.8E-03	4.1E-05	3.2E-05	2.5E+00	2.6E+00	1.7E-03	4.1E-05	3.0E-05	2.4E+00
Ozone Depletion (kg CFC-11 eq)	1.9E-08	6.9E-14	1.5E-11	1.2E-15	2.2E-08	1.9E-08	6.6E-14	1.5E-11	1.2E-15	2.1E-08
Acidification (kg SO ₂ eq)	1.6E-02	1.8E-05	3.0E-07	1.9E-07	1.1E-03	1.6E-02	1.7E-05	3.0E-07	1.8E-07	1.0E-03
Eutrophication (kg N eq)	6.8E-03	9.8E-07	5.2E-08	1.1E-08	1.5E-03	6.7E-03	9.3E-07	5.2E-08	1.0E-08	1.5E-03
Smog (kg O ₃ eq)	4.0E-01	5.1E-04	8.3E-06	5.2E-06	2.7E-02	4.0E-01	4.8E-04	8.3E-06	5.0E-06	2.6E-02
Resource Depletion, Fossil Fuels (MJ)	4.7E+00	3.5E-03	1.4E-04	6.1E-05	2.2E-01	4.7E+00	3.3E-03	1.4E-04	5.8E-05	2.1E-01
TRACI 2.1 Impact Category	NetKey Category 6A Punched Jack Module					NetKey Category 5e Punched Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.7E-03	4.1E-05	3.0E-05	2.4E+00	2.5E+00	2.7E-03	4.1E-05	3.4E-05	2.7E+00
Ozone Depletion (kg CFC-11 eq)	2.0E-08	6.6E-14	1.5E-11	1.2E-15	2.1E-08	1.9E-08	1.0E-13	1.5E-11	1.3E-15	2.3E-08
Acidification (kg SO ₂ eq)	1.6E-02	1.7E-05	3.0E-07	1.8E-07	1.0E-03	1.6E-02	2.9E-05	3.0E-07	2.0E-07	1.1E-03
Eutrophication (kg N eq)	6.8E-03	9.3E-07	5.2E-08	1.0E-08	1.5E-03	6.8E-03	1.6E-06	5.2E-08	1.1E-08	1.6E-03
Smog (kg O ₃ eq)	4.0E-01	4.8E-04	8.3E-06	5.0E-06	2.6E-02	3.9E-01	8.1E-04	8.3E-06	5.5E-06	2.8E-02
Resource Depletion, Fossil Fuels (MJ)	4.7E+00	3.3E-03	1.4E-04	5.8E-05	2.1E-01	4.7E+00	5.2E-03	1.4E-04	6.4E-05	2.3E-01

Table 6: TRACI Results per Declared Unit – Part 3



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RJ45 Jack Modules

All listed variations

According to ISO 14025

Environmental impact results were also analyzed using CML methodology. Those results are summarized below in Tables 7-9.

CML Impact Category	Category 5e TP Style Jack Module					Category 5e TG Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.5E+00	2.5E-03	4.1E-05	3.1E-05	2.4E+00	2.5E+00	2.6E-03	4.1E-05	3.2E-05	2.5E+00
Ozone Depletion (kg CFC ₋₁₁ eq)	1.5E-08	9.4E-14	1.1E-11	1.2E-15	1.6E-08	1.5E-08	9.7E-14	1.1E-11	1.2E-15	1.6E-08
Acidification (kg SO ₂ eq)	1.4E-02	2.1E-05	2.5E-07	1.5E-07	8.7E-04	1.4E-02	2.2E-05	2.5E-07	1.6E-07	9.0E-04
Eutrophication (kg N eq)	4.6E-03	3.9E-06	5.7E-08	2.7E-08	6.5E-04	4.6E-03	4.1E-06	5.7E-08	2.8E-08	6.7E-04
Smog (kg O ₃ eq)	6.5E-04	6.7E-07	9.2E-09	7.0E-09	3.1E-05	6.5E-04	6.9E-07	9.2E-09	7.3E-09	3.2E-05
Resource Depletion, Fossil Fuels (MJ)	3.4E+01	3.4E-02	1.0E-03	4.2E-04	1.8E+00	3.4E+01	3.5E-02	1.0E-03	4.4E-04	1.9E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.6E-07	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.6E-07
CML Impact Category	Category 6 TG Style Jack Module					Category 6 TP Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.8E-03	4.1E-05	3.2E-05	2.5E+00	2.6E+00	1.7E-03	4.1E-05	3.0E-05	2.4E+00
Ozone Depletion (kg CFC ₋₁₁ eq)	1.5E-08	6.8E-14	1.1E-11	1.2E-15	1.6E-08	1.5E-08	6.5E-14	1.1E-11	1.2E-15	1.6E-08
Acidification (kg SO ₂ eq)	1.4E-02	1.4E-05	2.5E-07	1.6E-07	9.0E-04	1.4E-02	1.4E-05	2.5E-07	1.5E-07	8.6E-04
Eutrophication (kg N eq)	4.6E-03	2.7E-06	5.7E-08	2.8E-08	6.7E-04	4.6E-03	2.5E-06	5.7E-08	2.7E-08	6.4E-04
Smog (kg O ₃ eq)	6.4E-04	4.8E-07	9.2E-09	7.3E-09	3.2E-05	6.3E-04	4.5E-07	9.2E-09	6.9E-09	3.1E-05
Resource Depletion, Fossil Fuels (MJ)	3.5E+01	2.5E-02	1.0E-03	4.4E-04	1.9E+00	3.5E+01	2.3E-02	1.0E-03	4.2E-04	1.8E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.6E-07	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.6E-07
CML Impact Category	Category 6A TG Style Jack Module					Category 5e Right Angle Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.9E-03	4.1E-05	3.4E-05	2.5E+00	2.5E+00	2.7E-03	4.1E-05	3.4E-05	2.7E+00
Ozone Depletion (kg CFC ₋₁₁ eq)	1.6E-08	7.3E-14	1.1E-11	1.3E-15	1.8E-08	1.5E-08	1.0E-13	1.1E-11	1.3E-15	1.7E-08
Acidification (kg SO ₂ eq)	1.4E-02	1.5E-05	2.5E-07	1.7E-07	9.5E-04	1.4E-02	2.3E-05	2.5E-07	1.7E-07	9.5E-04
Eutrophication (kg N eq)	4.6E-03	2.8E-06	5.7E-08	3.0E-08	6.8E-04	4.6E-03	4.3E-06	5.7E-08	2.9E-08	7.1E-04
Smog (kg O ₃ eq)	6.4E-04	5.0E-07	9.2E-09	7.7E-09	3.4E-05	6.6E-04	7.3E-07	9.2E-09	7.6E-09	3.4E-05
Resource Depletion, Fossil Fuels (MJ)	3.5E+01	2.6E-02	1.0E-03	4.6E-04	2.0E+00	3.4E+01	3.7E-02	1.0E-03	4.6E-04	1.9E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.7E-07	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.7E-07

Table 7: CML Results per Declared Unit – Part 1



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RJ45 Jack Modules

All listed variations

According to ISO 14025

CML Impact Category	Category 6 Right Angle Style Jack Module					Category 6A Right Angle Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.9E-03	4.1E-05	3.5E-05	2.7E+00	2.6E+00	2.0E-03	4.1E-05	3.5E-05	2.7E+00
Ozone Depletion (kg CFC-11 eq)	1.5E-08	7.2E-14	1.1E-11	1.3E-15	1.7E-08	1.6E-08	7.4E-14	1.1E-11	1.3E-15	1.7E-08
Acidification (kg SO ₂ eq)	1.4E-02	1.5E-05	2.5E-07	1.7E-07	9.5E-04	1.4E-02	1.6E-05	2.5E-07	1.7E-07	9.5E-04
Eutrophication (kg N eq)	4.6E-03	2.8E-06	5.7E-08	3.0E-08	7.1E-04	4.6E-03	2.9E-06	5.7E-08	3.0E-08	7.1E-04
Smog (kg O ₃ eq)	6.4E-04	5.0E-07	9.2E-09	7.9E-09	3.4E-05	6.4E-04	5.2E-07	9.2E-09	7.9E-09	3.4E-05
Resource Depletion, Fossil Fuels (MJ)	3.5E+01	2.6E-02	1.0E-03	4.7E-04	1.9E+00	3.5E+01	2.7E-02	1.0E-03	4.7E-04	1.9E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.7E-07	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.7E-07
CML Impact Category	Category 5e Shielded Jack Module					Category 6 Shielded Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	5.3E-03	4.1E-05	6.6E-05	1.9E+00	2.7E+00	3.8E-03	4.1E-05	6.6E-05	1.9E+00
Ozone Depletion (kg CFC-11 eq)	1.9E-08	2.0E-13	1.1E-11	2.5E-15	3.7E-08	1.9E-08	1.4E-13	1.1E-11	2.5E-15	3.7E-08
Acidification (kg SO ₂ eq)	1.8E-02	4.5E-05	2.5E-07	3.3E-07	1.5E-03	1.9E-02	3.0E-05	2.5E-07	3.3E-07	1.5E-03
Eutrophication (kg N eq)	1.2E-02	8.4E-06	5.7E-08	5.8E-08	7.0E-04	1.2E-02	5.5E-06	5.7E-08	5.8E-08	7.1E-04
Smog (kg O ₃ eq)	8.3E-04	1.4E-06	9.2E-09	1.5E-08	5.8E-05	8.2E-04	9.8E-07	9.2E-09	1.5E-08	5.8E-05
Resource Depletion, Fossil Fuels (MJ)	3.5E+01	7.2E-02	1.0E-03	9.0E-04	3.8E+00	3.6E+01	5.1E-02	1.0E-03	9.0E-04	3.8E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	1.0E-04	0.0E+00	4.1E-11	0.0E+00	2.5E-07	1.0E-04	0.0E+00	4.1E-11	0.0E+00	2.5E-07
CML Impact Category	Category 6A Shielded Jack Module					Category 5e TG Style 28/30 AWG Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.7E+00	3.8E-03	4.1E-05	6.7E-05	1.9E+00	2.5E+00	2.6E-03	4.1E-05	3.2E-05	2.6E+00
Ozone Depletion (kg CFC-11 eq)	1.9E-08	1.4E-13	1.1E-11	2.5E-15	3.7E-08	1.5E-08	9.8E-14	1.1E-11	1.2E-15	1.7E-08
Acidification (kg SO ₂ eq)	1.9E-02	3.0E-05	2.5E-07	3.3E-07	1.6E-03	1.4E-02	2.2E-05	2.5E-07	1.6E-07	9.2E-04
Eutrophication (kg N eq)	1.2E-02	5.6E-06	5.7E-08	5.8E-08	7.1E-04	4.6E-03	4.1E-06	5.7E-08	2.8E-08	6.8E-04
Smog (kg O ₃ eq)	8.2E-04	9.9E-07	9.2E-09	1.5E-08	5.9E-05	6.5E-04	7.0E-07	9.2E-09	7.4E-09	3.3E-05
Resource Depletion, Fossil Fuels (MJ)	3.6E+01	5.1E-02	1.0E-03	9.1E-04	3.8E+00	3.4E+01	3.5E-02	1.0E-03	4.4E-04	1.9E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	1.0E-04	0.0E+00	4.1E-11	0.0E+00	2.5E-07	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.7E-07

Table 8: CML Results per Declared Unit – Part 2



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RJ45 Jack Modules

All listed variations

According to ISO 14025

CML Impact Category	Category 6 TG Style 28/30 AWG Jack Module					Category 6A TG Style 28/30 AWG Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.8E-03	4.1E-05	3.2E-05	2.6E+00	2.6E+00	1.9E-03	4.1E-05	3.4E-05	2.6E+00
Ozone Depletion (kg CFC-11 eq)	1.5E-08	6.9E-14	1.1E-11	1.2E-15	1.7E-08	1.6E-08	7.3E-14	1.1E-11	1.3E-15	1.8E-08
Acidification (kg SO ₂ eq)	1.4E-02	1.5E-05	2.5E-07	1.6E-07	9.2E-04	1.4E-02	1.5E-05	2.5E-07	1.7E-07	9.6E-04
Eutrophication (kg N eq)	4.6E-03	2.7E-06	5.7E-08	2.8E-08	6.8E-04	4.6E-03	2.9E-06	5.7E-08	3.0E-08	7.0E-04
Smog (kg O ₃ eq)	6.4E-04	4.8E-07	9.2E-09	7.3E-09	3.3E-05	6.4E-04	5.1E-07	9.2E-09	7.8E-09	3.4E-05
Resource Depletion, Fossil Fuels (MJ)	3.5E+01	2.5E-02	1.0E-03	4.4E-04	1.9E+00	3.5E+01	2.6E-02	1.0E-03	4.7E-04	2.0E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.7E-07	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.7E-07
CML Impact Category	NetKey Category 6 Punchdown Jack Module					NetKey Category 6 TP Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.6E-03	4.1E-05	2.9E-05	2.2E+00	2.6E+00	1.8E-03	4.1E-05	3.1E-05	2.5E+00
Ozone Depletion (kg CFC-11 eq)	1.5E-08	6.2E-14	1.1E-11	1.1E-15	1.5E-08	1.5E-08	6.7E-14	1.1E-11	1.2E-15	1.6E-08
Acidification (kg SO ₂ eq)	1.4E-02	1.3E-05	2.5E-07	1.4E-07	8.2E-04	1.4E-02	1.4E-05	2.5E-07	1.6E-07	8.9E-04
Eutrophication (kg N eq)	4.6E-03	2.4E-06	5.7E-08	2.5E-08	6.0E-04	4.6E-03	2.6E-06	5.7E-08	2.7E-08	6.6E-04
Smog (kg O ₃ eq)	6.4E-04	4.3E-07	9.2E-09	6.6E-09	2.9E-05	6.4E-04	4.7E-07	9.2E-09	7.2E-09	3.2E-05
Resource Depletion, Fossil Fuels (MJ)	3.5E+01	2.2E-02	1.0E-03	4.0E-04	1.7E+00	3.5E+01	2.4E-02	1.0E-03	4.3E-04	1.8E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.5E-07	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.6E-07
CML Impact Category	NetKey Category 6A Punchdown Jack Module					NetKey Category 5e Punchdown Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
Global Warming (kg CO ₂ eq)	2.6E+00	1.7E-03	4.1E-05	3.0E-05	2.1E+00	2.5E+00	2.3E-03	4.1E-05	2.9E-05	2.2E+00
Ozone Depletion (kg CFC-11 eq)	1.6E-08	6.4E-14	1.1E-11	1.1E-15	1.5E-08	1.5E-08	8.8E-14	1.1E-11	1.1E-15	1.5E-08
Acidification (kg SO ₂ eq)	1.4E-02	1.4E-05	2.5E-07	1.5E-07	8.0E-04	1.4E-02	2.0E-05	2.5E-07	1.4E-07	8.2E-04
Eutrophication (kg N eq)	4.6E-03	2.5E-06	5.7E-08	2.6E-08	5.8E-04	4.6E-03	3.7E-06	5.7E-08	2.5E-08	6.0E-04
Smog (kg O ₃ eq)	6.4E-04	4.5E-07	9.2E-09	6.8E-09	2.9E-05	6.6E-04	6.3E-07	9.2E-09	6.6E-09	2.9E-05
Resource Depletion, Fossil Fuels (MJ)	3.5E+01	2.3E-02	1.0E-03	4.1E-04	1.7E+00	3.4E+01	3.2E-02	1.0E-03	4.0E-04	1.7E+00
Resource Depletion, Non Fossil Fuels (kg Sb eq)	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.4E-07	7.5E-05	0.0E+00	4.1E-11	0.0E+00	1.5E-07

Table 9: CML Results per Declared Unit – Part 3



ENVIRONMENTAL PRODUCT DECLARATION



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RJ45 Jack Modules

All listed variations

According to ISO 14025

Use of Resources

The following section details the use of resources throughout the life cycle of the product. Table 10 contains a legend describing the resource use categories analyzed, and Tables 11-13 contain resource use quantities for each product.

Category Description	Abbreviation	Unit
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE	MJ, net calorific value
Use of renewable primary energy resources used as raw materials	PERM	MJ, net calorific value
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PERT	MJ, net calorific value
Use of nonrenewable primary energy excluding nonrenewable primary energy resources used as raw materials	ENRE	MJ, net calorific value
Use of nonrenewable primary energy resources used as raw materials	PENRM	MJ, net calorific value
Total use of nonrenewable primary energy resources (primary energy and primary energy resources used as raw materials)	PENRT	MJ, net calorific value
Use of secondary material	SM	kg
Use of renewable secondary fuels	RSF	MJ, net calorific value
Use of nonrenewable secondary fuels	NRSF	MJ, net calorific value
Use of net fresh water	FW	m ³

Table 10: Use of Resources Category Descriptions



ENVIRONMENTAL PRODUCT DECLARATION



infrastructure for a connected world

RJ45 Jack Modules

All listed variations

According to ISO 14025

Resource Use Category	Category 5e TP Style Jack Module					Category 5e TG Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	4.2E-01	0.0E+00	4.3E-06	0.0E+00	2.8E-02	4.4E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	4.2E-01	0.0E+00	4.3E-06	0.0E+00	2.8E-02	4.4E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02
ENRE	3.5E+01	3.4E-02	1.1E-03	4.2E-04	1.9E+00	3.5E+01	3.5E-02	1.1E-03	4.4E-04	2.0E+00
PENRM	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.5E+01	3.4E-02	1.1E-03	4.2E-04	1.9E+00	3.5E+01	3.5E-02	1.1E-03	4.4E-04	2.0E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	3.3E+00	0.0E+00	2.5E-05	0.0E+00	1.7E-01	3.5E+00	0.0E+00	2.5E-05	0.0E+00	1.8E-01
Resource Use Category	Category 6 TG Style Jack Module					Category 6 TP Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.7E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.7E-02
ENRE	3.6E+01	2.5E-02	1.1E-03	4.4E-04	2.0E+00	3.6E+01	2.3E-02	1.1E-03	4.2E-04	1.9E+00
PENRM	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.6E+01	2.5E-02	1.1E-03	4.4E-04	2.0E+00	3.6E+01	2.3E-02	1.1E-03	4.2E-04	1.9E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	8.6E-01	0.0E+00	2.5E-05	0.0E+00	1.8E-01	8.4E-01	0.0E+00	2.5E-05	0.0E+00	1.7E-01
Resource Use Category	Category 6A TG Style Jack Module					Category 5e Right Angle Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	1.7E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02	4.6E-01	0.0E+00	4.3E-06	0.0E+00	3.0E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	1.7E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02	4.6E-01	0.0E+00	4.3E-06	0.0E+00	3.0E-02
ENRE	3.6E+01	2.6E-02	1.1E-03	4.6E-04	2.1E+00	3.5E+01	3.7E-02	1.1E-03	4.6E-04	2.1E+00
PENRM	1.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.6E+01	2.6E-02	1.1E-03	4.6E-04	2.1E+00	3.5E+01	3.7E-02	1.1E-03	4.6E-04	2.1E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	9.1E-01	0.0E+00	2.5E-05	0.0E+00	1.8E-01	3.7E+00	0.0E+00	2.5E-05	0.0E+00	1.9E-01

Table 11: Use of Resources per Declared Unit – Part 1



ENVIRONMENTAL PRODUCT DECLARATION



infrastructure for a connected world

RJ45 Jack Modules

All listed variations

According to ISO 14025

Resource Use Category	Category 6 Right Angle Style Jack Module					Category 6A Right Angle Style Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	1.6E-01	0.0E+00	4.3E-06	0.0E+00	3.0E-02	1.7E-01	0.0E+00	4.3E-06	0.0E+00	3.0E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	1.6E-01	0.0E+00	4.3E-06	0.0E+00	3.0E-02	1.7E-01	0.0E+00	4.3E-06	0.0E+00	3.0E-02
ENRE	3.6E+01	2.6E-02	1.1E-03	4.7E-04	2.1E+00	3.6E+01	2.7E-02	1.1E-03	4.7E-04	2.1E+00
PENRM	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.6E+01	2.6E-02	1.1E-03	4.7E-04	2.1E+00	3.6E+01	2.7E-02	1.1E-03	4.7E-04	2.1E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	8.5E-01	0.0E+00	2.5E-05	0.0E+00	1.9E-01	9.0E-01	0.0E+00	2.5E-05	0.0E+00	1.9E-01
Resource Use Category	Category 5e Shielded Jack Module					Category 6 Shielded Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	7.4E-01	0.0E+00	4.3E-06	0.0E+00	3.4E-02	4.9E-01	0.0E+00	4.3E-06	0.0E+00	3.4E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	7.4E-01	0.0E+00	4.3E-06	0.0E+00	3.4E-02	4.9E-01	0.0E+00	4.3E-06	0.0E+00	3.4E-02
ENRE	3.6E+01	7.2E-02	1.1E-03	9.0E-04	4.0E+00	3.6E+01	5.1E-02	1.1E-03	9.0E-04	4.0E+00
PENRM	1.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.6E+01	7.2E-02	1.1E-03	9.0E-04	4.0E+00	3.6E+01	5.1E-02	1.1E-03	9.0E-04	4.0E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	6.5E+00	0.0E+00	2.5E-05	0.0E+00	2.0E-01	4.2E+00	0.0E+00	2.5E-05	0.0E+00	2.1E-01
Resource Use Category	Category 6A Shielded Jack Module					Category 5e TG Style 28/30 AWG Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	5.0E-01	0.0E+00	4.3E-06	0.0E+00	3.4E-02	4.4E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	5.0E-01	0.0E+00	4.3E-06	0.0E+00	3.4E-02	4.4E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02
ENRE	3.6E+01	5.1E-02	1.1E-03	9.1E-04	4.0E+00	3.5E+01	3.5E-02	1.1E-03	4.4E-04	2.0E+00
PENRM	1.4E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.6E+01	5.1E-02	1.1E-03	9.1E-04	4.0E+00	3.5E+01	3.5E-02	1.1E-03	4.4E-04	2.0E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	4.2E+00	0.0E+00	2.5E-05	0.0E+00	2.1E-01	3.5E+00	0.0E+00	2.5E-05	0.0E+00	1.8E-01

Table 12: Use of Resources per Declared Unit – Part 2



ENVIRONMENTAL PRODUCT DECLARATION



infrastructure for a connected world

RJ45 Jack Modules

All listed variations

According to ISO 14025

Resource Use Category	Category 6 TG Style 28/30 AWG Jack Module					Category 6A TG Style 28/30 AWG Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02	1.7E-01	0.0E+00	4.3E-06	0.0E+00	3.0E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.9E-02	1.7E-01	0.0E+00	4.3E-06	0.0E+00	3.0E-02
ENRE	3.6E+01	2.5E-02	1.1E-03	4.4E-04	2.0E+00	3.6E+01	2.6E-02	1.1E-03	4.7E-04	2.2E+00
PENRM	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.5E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.6E+01	2.5E-02	1.1E-03	4.4E-04	2.0E+00	3.6E+01	2.6E-02	1.1E-03	4.7E-04	2.2E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	8.5E-01	0.0E+00	2.5E-05	0.0E+00	1.8E-01	9.1E-01	0.0E+00	2.5E-05	0.0E+00	1.9E-01
Resource Use Category	NetKey Category 6 Punchdown Jack Module					NetKey Category 6 TP Style Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.6E-02	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.8E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.6E-02	1.6E-01	0.0E+00	4.3E-06	0.0E+00	2.8E-02
ENRE	3.6E+01	2.2E-02	1.1E-03	4.0E-04	1.8E+00	3.6E+01	2.4E-02	1.1E-03	4.3E-04	2.0E+00
PENRM	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.6E+01	2.2E-02	1.1E-03	4.0E-04	1.8E+00	3.6E+01	2.4E-02	1.1E-03	4.3E-04	2.0E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	8.6E-01	0.0E+00	2.5E-05	0.0E+00	1.6E-01	8.4E-01	0.0E+00	2.5E-05	0.0E+00	1.8E-01
Resource Use Category	NetKey Category 6A Punchdown Jack Module					NetKey Category 5e Punchdown Jack Module				
	Upstream and Core		Downstream			Upstream and Core		Downstream		
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
PERE	1.7E-01	0.0E+00	4.3E-06	0.0E+00	2.5E-02	4.6E-01	0.0E+00	4.3E-06	0.0E+00	2.6E-02
PERM	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PERT	1.7E-01	0.0E+00	4.3E-06	0.0E+00	2.5E-02	4.6E-01	0.0E+00	4.3E-06	0.0E+00	2.6E-02
ENRE	3.6E+01	2.3E-02	1.1E-03	4.1E-04	1.8E+00	3.5E+01	3.2E-02	1.1E-03	4.0E-04	1.8E+00
PENRM	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.6E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00
PENRT	3.6E+01	2.3E-02	1.1E-03	4.1E-04	1.8E+00	3.5E+01	3.2E-02	1.1E-03	4.0E-04	1.8E+00
SM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
RSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NRSF	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
FW	9.1E-01	0.0E+00	2.5E-05	0.0E+00	1.5E-01	3.7E+00	0.0E+00	2.5E-05	0.0E+00	1.6E-01

Table 13: Use of Resources per Declared Unit – Part 3



ENVIRONMENTAL PRODUCT DECLARATION



infrastructure for a connected world

RJ45 Jack Modules

All listed variations

According to ISO 14025

Waste Characteristics

The following section details the waste and output flows throughout the life cycle of the product. Table 14 contains a legend describing the resource use categories analyzed, and Tables 15-17 contain waste quantities for each product.

Category Description	Abbreviation	Unit
Hazardous waste disposed	HWD	kg
Non-hazardous waste disposed	NHWD	kg
Radioactive waste disposed	RWD	kg
Components for reuse	CRU	kg
Materials for recycling	MFR	kg
Material for energy recovery	MER	kg
Exported electrical energy	EEE	MJ
Exported thermal energy	EET	MJ

Table 14: Waste and Output Category Descriptions



ENVIRONMENTAL PRODUCT DECLARATION



infrastructure for a connected world

RJ45 Jack Modules

All listed variations

According to ISO 14025

Waste Category	Category 5e TP Style Jack Module					Category 5e TG Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.3E-06	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.4E-06
NHWD	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.5E+00	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.7E+00
RWD	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.5E-06	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.5E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Waste Category	Category 6 TG Style Jack Module					Category 6 TP Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.4E-06	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.3E-06
NHWD	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.7E+00	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.4E+00
RWD	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.5E-06	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.5E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Waste Category	Category 6A TG Style Jack Module					Category 5e Right Angle Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.7E-05	0.0E+00	4.5E-10	0.0E+00	4.5E-06	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.7E-06
NHWD	1.7E-01	0.0E+00	5.3E-03	0.0E+00	6.0E+00	1.7E-01	0.0E+00	5.3E-03	0.0E+00	6.0E+00
RWD	5.3E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Table 15: Waste and Outputs per Declared Unit – Part 1



ENVIRONMENTAL PRODUCT DECLARATION



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RJ45 Jack Modules

All listed variations

According to ISO 14025

Waste Category	Category 6 Right Angle Style Jack Module					Category 6A Right Angle Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.7E-06	1.7E-05	0.0E+00	4.5E-10	0.0E+00	4.7E-06
NHWD	1.7E-01	0.0E+00	5.3E-03	0.0E+00	6.0E+00	1.7E-01	0.0E+00	5.3E-03	0.0E+00	6.0E+00
RWD	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Waste Category	Category 5e Shielded Jack Module					Category 6 Shielded Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.8E-05	0.0E+00	4.5E-10	0.0E+00	4.7E-06	1.8E-05	0.0E+00	4.5E-10	0.0E+00	4.7E-06
NHWD	1.9E-01	0.0E+00	5.3E-03	0.0E+00	1.2E+01	1.9E-01	0.0E+00	5.3E-03	0.0E+00	1.2E+01
RWD	6.5E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06	6.5E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Waste Category	Category 6A Shielded Jack Module					Category 5e TG Style 28/30 AWG Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.8E-05	0.0E+00	4.5E-10	0.0E+00	4.7E-06	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.5E-06
NHWD	1.9E-01	0.0E+00	5.3E-03	0.0E+00	1.2E+01	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.7E+00
RWD	6.5E-06	0.0E+00	2.0E-10	0.0E+00	1.7E-06	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Table 16: Waste and Outputs per Declared Unit – Part 2



ENVIRONMENTAL PRODUCT DECLARATION



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RJ45 Jack Modules

All listed variations

According to ISO 14025

Waste Category	Category 6 TG Style 28/30 AWG Jack Module					Category 6A TG Style 28/30 AWG Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.5E-06	1.7E-05	0.0E+00	4.5E-10	0.0E+00	4.7E-06
NHWD	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.7E+00	1.7E-01	0.0E+00	5.3E-03	0.0E+00	6.1E+00
RWD	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06	5.3E-06	0.0E+00	2.0E-10	0.0E+00	1.6E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Waste Category	NetKey Category 6 Punchdown Jack Module					NetKey Category 6 TP Style Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.0E-06	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.4E-06
NHWD	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.2E+00	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.6E+00
RWD	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.4E-06	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.5E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Waste Category	NetKey Category 6A Punchdown Jack Module					NetKey Category 5e Punchdown Jack Module				
	Upstream and Core	Downstream				Upstream and Core	Downstream			
	A1 - A3	A4	A5	C2	C4	A1 - A3	A4	A5	C2	C4
HWD	1.7E-05	0.0E+00	4.5E-10	0.0E+00	3.8E-06	1.5E-05	0.0E+00	4.5E-10	0.0E+00	4.0E-06
NHWD	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.2E+00	1.7E-01	0.0E+00	5.3E-03	0.0E+00	5.2E+00
RWD	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.3E-06	5.2E-06	0.0E+00	2.0E-10	0.0E+00	1.4E-06
CRU	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MFR	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00
MER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EEE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
EET	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Table 17: Waste and Outputs per Declared Unit – Part 3



ENVIRONMENTAL PRODUCT DECLARATION

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RJ45 Jack Modules

All listed variations

According to ISO 14025

Additional Environmental Information

References

- ISO 21930: Sustainability in building construction – Environmental declaration of building products
- EPA, Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts (TRACI)
- (ILCD, 2010) Joint Research Commission, 2010, ILCD Handbook: General Guide for Life Cycle Assessment
- Intergovernmental Panel on Climate Change (IPCC)
- ISO 14025:2006 *Environmental labels and declarations – Type III environmental declarations – Principles and procedures*
- ISO 14040:2006 *Environmental management - Life cycle assessment – Principles and framework*
- ISO 14044:2006 *Environmental management - Life cycle assessment – Requirements and guidelines*
- UL Environment / IBU Core PCR Par A: Product Category Rules for Building-Related Products and Services; Part A: Calculation Rules for the Life Cycle Assessment and Requirements of the Project report.
- European Standard, Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products (EN 15804:2012+A1:2013), La Plaine Saint-Denis: Afnor, 2013.

LCA Development

This EPD and corresponding LCA were prepared by Sustainable Solutions Corporation of Royersford, Pennsylvania.



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