Legrand DPC LLC dba Server Technology
1040 Sandhill Rd
Reno, NV 89521

Customer Service 1-800-835-1515
www.servertech.com

Product Environmental Profile

Modular Power Distribution System (MPDS) PDU

LEGRAND'S ENVIRONMENTAL COMMITMENTS

• Incorporate environmental management into our industrial sites

Of all Legrand sites worldwide, over 85% are ISO 14001-certified (sites belonging to the Group for more than five years).

• Offer our customers environmentally friendly solutions

Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.

• Involve the environment in product design and provide informations in compliance with ISO 14025

Reduce the environmental impact of products over their whole life cycle.
Provide our customers with all relevant information (composition, consumption, end of life, etc.).

For more information on Legrand's PEPs and other sustainability initiatives, visit www.legrand.us/about-us/csr/circular-economy

REFERENCE PRODUCT

Function	The Modular Power Distribution System (MPDS) PDU has a detachable power supply cord, a Horizontal Power Distribution Unit (HPDU) incorporating six circuit breakers, "smart" monitoring functionality and a GUI interface that can be accessed via Ethernet. The HPDU can be utilized with either a single input VPS or two HPDUs can be utilized with a dual input, VPS. Furthermore, the HPDU contains an LCD display that allows for local access to critical parameters.
Reference Product	  Part Number: MPDS

PRODUCTS CONCERNED

The environmental data is representative of the following products:

Modular Power Distribution System (MPDS) Power Distribution Unit (PDU)

Legrand DPC LLC dba Server Technology
1040 Sandhill Rd
Reno, NV 89521

Customer Service 1-800-835-1515
www.servertech.com

Product Environmental Profile

Modular Power Distribution System (MPDS) PDU

PEP ecopassport®

CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It respects the restrictions on use of hazardous substances as defined in the RoHS directive 2011/65/EU amended by delegated directive (EU) 2015/863, and its amendment 2017/2102/EU.

Total weight of Reference Product	**24.66 kg**

Plastics as % of weight		**Metals as % of weight**		**Others as % of weight**	
Product only: 20.77 kg					
PA	**0.7%**	Steel	**36.3%**	Electrical wire (high current)	**35.6%**
ABS	**0.4%**	Copper and copper alloys	**0.6%**	Various components	**9.0%**
PP	**0.2%**	Aluminum	**0.3%**	Printed Wiring Board	**0.8%**
PC	**0.2%**			LCD screen < 100cm²	**0.1%**
PET	**0.1%**				
Various plastics	**<0,1%**				
Packaging only: 3.89 kg					
PE (Packaging)	**0.6%**			Cardboard	**15.1%**
Total plastics	**2.2%**	**Total metals**	**37.2%**	**Total others**	**60.6%**

MANUFACTURING

This Reference Product comes from sites that, in their majority, have received ISO14001 certification.

DISTRIBUTION

Products are distributed from logistics centers located to optimize transport efficiency using EPA SmartWay® certified carriers to reduce greenhouse gases emissions. Information on the distance of distribution is international transport 8516 km by air plane. The intercontinental transport 656km by heavy truck . This represents transportation of the Reference Product from our warehouse to the local point of distribution in the European market.

Packaging is compliant with European directive 2004/12/EU concerning packaging and packaging waste.

INSTALLATION

For the installation of the product, only standard tools are needed. No electricity is required for installing the Reference Product.

USE

Under normal conditions of use, this product requires no servicing, no maintenance or additional products.

END OF LIFE

The product end of life is taken into account during the design phase. Dismantling and sorting of components or materials is made as easy as possible with a view to recycling or failing that, another form of reuse. This product falls within the scope of the WEEE directive (2012/19/EU). Therefore it must be processed through local WEEE recycling/recovery channels.

• Elements to process specifically:
In accordance with the requirements of this Directive, the following components must be removed and sent to specific channels for processing which comply with the WEEE Directive 2012/19/EU:

- Printed Circuit Board (PCB) Assemblies: 2.44 kg
- Power Supply Cable: 5.24 kg

The sale of this product is subject to a contribution to eco-organisations in each country responsible for managing end of life products in the field of application of the European Waste Electronic and Electrical Equipment Directive.

ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end of life. It is representative from worlwide marketed products.
.

For each stage, the following modelling elements were taken into account at each life cycle stage (and module):

System Boundary	**Manufacturing (A1-A3)**	Materials and components of the product, all transport for the manufacturing, the packaging and the waste generated by the manufacturing.
	Distribution (A4)	Transport between the last distribution center and an average delivery point in the sales area.
	Installation (A5)	The end of life of the packaging.
	Use (B1-B7)	• Under normal conditions of use, this type of product requires no servicing or maintenance. • No consumables are necessary to use this type of product. • Use scenario: annual average power consumption as 10.4W during the 20 year working life. This modelling duration does not constitute a minimum durability requirement. • Energy model: Electricity Mix_Low voltage_2018_Europe_EU-27, 2018
	End of life (C1-C4)	The default end of life scenario modelled maximizes the environmental impact using the PCR hypothesis for "Local transport": 621 miles (1000 km) by heavy truck and landfilling.
Benefits & Loads (Module D)		Module D is calculated according to PCR-ed4-EN-2021 09 06 based on the materials recycled and the modelled end-of-life scenario. It expresses the net benefits and loads beyond the boundaries of the system, and are not to be included in the life cycle totals.
Software and database used		PEF EF 3.0 (compliance: PEP ed.4, EN15804+A2) v2.0, EIME V6 & its database CODDE-2023-02

For each stage, the energy mix modelled is based on default information integrated in the data modules used from the aforementioned database unless otherwise indicated.

Legrand DPC LLC dba Server Technology
1040 Sandhill Rd
Reno, NV 89521

Customer Service 1-800-835-1515
www.servertech.com

Product Environmental Profile

Modular Power Distribution System (MPDS) PDU

ENVIRONMENTAL IMPACTS

Environmental Impact Indicators		Total Life Cycle Impacts		Manufacturing	Distribution	Installation	Use	End of Life	Benefits & Loads
				A1-A3	A4	A5	B1-B7	C1-C4	Module D
Climate change - total	GWP	1.34E+03	kg CO_2 eq	5.57E+02	6.29E+00	7.76E-01	7.46E+02	2.48E+01	-3.19E+01
Climate change - fossil fuels	GWPf	1.33E+03	kg CO_2 eq	5.53E+02	6.29E+00	7.76E-01	7.45E+02	2.34E+01	-3.18E+01
Climate change - biogenics	GWPb	6.57E+00	kg CO_2 eq	4.14E+00	0*	0*	9.96E-01	1.44E+00	-4.50E-02
Climate change - land use and land use transformation	GWPlu	5.23E-05	kg CO_2 eq	5.19E-05	0*	0*	0*	4.26E-07	0.00E+00
Ozone depletion	ODP	3.27E-05	kg CFC-11 eq	2.93E-05	7.84E-09	6.29E-09	3.19E-06	1.26E-07	-2.54E-07
Acidification	AP	7.61E+00	mole of H+ eq	3.01E+00	2.53E-01	2.90E-03	4.26E+00	7.93E-02	-1.35E-01
Eutrophication, freshwater	Epf	3.73E-03	kg P eq	9.24E-04	2.11E-06	7.71E-07	2.04E-03	7.58E-04	-1.50E-05
Eutrophication, marine aquatic	Epm	1.41E+00	kg of N eq	8.54E-01	5.78E-02	1.35E-03	4.84E-01	1.53E-02	-1.87E-02
Eutrophication, terrestrial	Ept	1.73E+01	mole of N eq	9.25E+00	6.33E-01	1.42E-02	7.27E+00	1.68E-01	-2.04E-01
Photochemical ozone formation	POCP	4.23E+00	kg NMVOC eq	2.45E+00	1.63E-01	3.43E-03	1.55E+00	5.78E-02	-7.73E-02
Abiotic resource depletion – elements	ADPe	5.99E-02	kg Sb eq	5.98E-02	0*	0*	5.41E-05	2.27E-05	-4.76E-03
Abiotic resource depletion – fossil fuels	ADPf	3.22E+04	MJ	1.16E+04	7.74E+01	3.70E+00	1.90E+04	1.53E+03	-2.34E+03
Water use	WU	1.91E+02	m^3 world eq	1.55E+02	1.99E-02	3.86E-01	2.64E+01	8.62E+00	-1.39E+01

The values of the indicators defined in the PCR-ed4-EN-2021 09 06 are available in the digital database of pep-ecopassport.org website.

The environmental impact of the Reference Product is most significant during the Manufacturing and Use stages.

0*: represents less than 0.01% of the total life cycle of the reference flow

Legrand DPC LLC dba Server Technology
1040 Sandhill Rd
Reno, NV 89521

Customer Service 1-800-835-1515
www.servertech.com

Product Environmental Profile

Modular Power Distribution System (MPDS) PDU

ENVIRONMENTAL IMPACTS

Inventory Flow Indicators		Total Life Cycle Impacts		Manufacturing	Distribution	Installation	Use	End of Life	Benefits & Loads
				A1-A3	A4	A5	B1-B7	C1-C4	Module D
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials	ERP	3.70E+03	MJ	4.75E+01	0*	0*	3.65E+03	7.15E-01	-1.37E+00
Use of renewable primary energy resources used as raw materials	ERM	7.45E+01	MJ	7.45E+01	0*	0*	0*	0*	0.00E+00
Total use of renewable primary energy resources	ER	3.77E+03	MJ	1.22E+02	0*	0*	3.65E+03	7.15E-01	-1.37E+00
Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials	ENRP	3.20E+04	MJ	1.14E+04	7.74E+01	3.70E+00	1.90E+04	1.53E+03	-2.34E+03
Use of non-renewable primary energy resources used as raw materials	ENRM	2.15E+02	MJ	2.15E+02	0*	0*	0*	0*	-1.20E+00
Total use of non-renewable primary energy resources	ENR	3.22E+04	MJ	1.16E+04	7.74E+01	3.70E+00	1.90E+04	1.53E+03	-2.34E+03
Use of secondary materials	USM	2.77E-05	kg	2.77E-05	0*	0*	0*	0*	0.00E+00
Use of renewable secondary fuels	URSF	0.00E+00	MJ	0*	0*	0*	0*	0*	0.00E+00
Use of non-renewable secondary fuels	UNRSF	0.00E+00	MJ	0*	0*	0*	0*	0*	0.00E+00
Net use of fresh water	NUFW	4.44E+00	m^3	3.62E+00	4.64E-04	8.99E-03	6.15E-01	2.01E-01	-3.24E-01
Hazardous waste disposed	HWD	8.64E+02	kg	8.40E+02	0*	0*	1.39E+01	9.79E+00	-8.67E+01
Non-hazardous waste disposed	NHWD	2.31E+02	kg	1.16E+02	1.85E-01	3.92E+00	1.07E+02	2.85E+00	-2.00E+00
Radioactive waste disposed	RWD	1.59E-01	kg	1.36E-01	1.28E-04	0*	2.25E-02	4.38E-04	-1.35E-03
Components for re-use	CRU	0.00E+00	kg	0*	0*	0*	0*	0*	0.00E+00
Materials for recycling	MRE	9.78E+00	kg	2.36E+00	0*	0*	0*	7.42E+00	0.00E+00
Materials for energy recovery	MER	0.00E+00	kg	0*	0*	0*	0*	0*	0.00E+00
Exported energy	EE	0.00E+00	MJ	0*	0*	0*	0*	0*	0.00E+00
Biogenic carbon content of the product	BCpdt	0.00E+00	kg C	0*	0*	0*	0*	0*	0.00E+00
Biogenic carbon content of the associated packaging	BCpkg	1.05E+00	kg C	1.05E+00	0*	0*	0*	0*	0.00E+00

In accordance with the PCR, the "Benefits & Loads" are beyond the system boundary and are thus not included in the results of "Total Life Cycle Impacts".

The values of the indicators defined in the PCR-ed4-EN-2021 09 06 are available in the digital database of pep-ecopassport.org website.

0*: represents less than 0.01% of the total life cycle of the reference flow

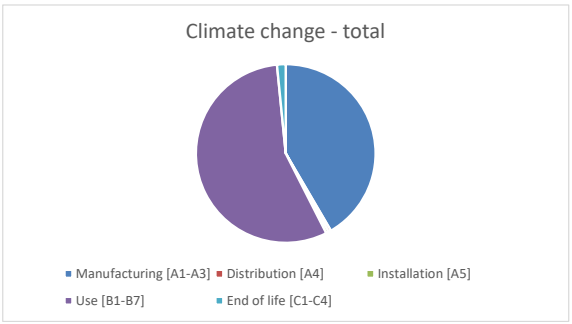
Legrand DPC LLC dba Server Technology
1040 Sandhill Rd
Reno, NV 89521

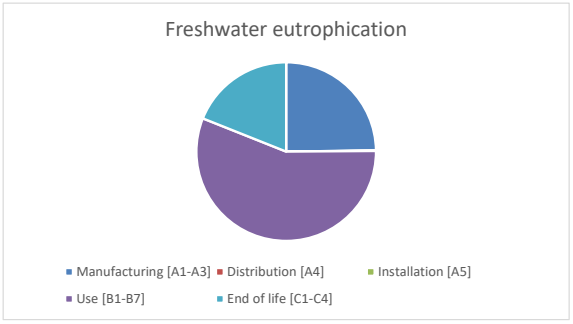
Customer Service 1-800-835-1515
www.servertech.com

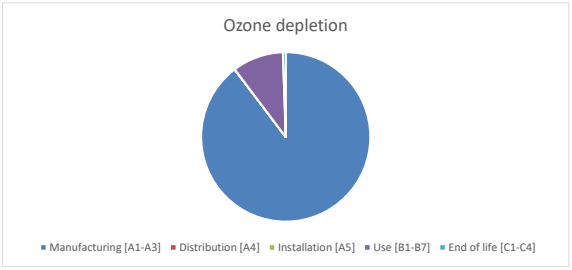
Product Environmental Profile

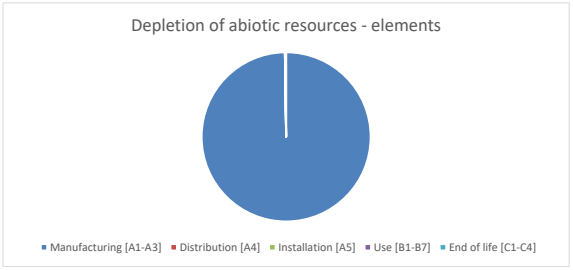
Modular Power Distribution System (MPDS) PDU

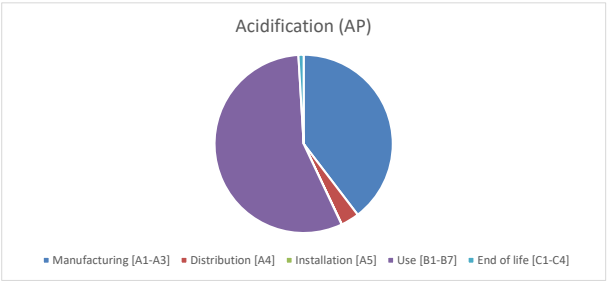
ENVIRONMENTAL IMPACTS











Registration number: **LGRP-01782-V01.01-EN**	Drafting rules: **"PEP-PCR-ed4-EN-2021 09 06"**
Verifier accreditation number: **VH02**	Information and reference documents: **www.pep-ecopassport.org**
Date of issue : **11-2023**	Validity period : **5 years**
Independent verification of the declaration and data in compliance with ISO 14025:2006 **Internal** ☒ **External** ☐	
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)	
PEP compliant with XP C08-100-1:2016 or EN 50693:2019 The content of this PEP cannot be compared with content from any other program.	
PEP compliant with ISO 14025:2006: "Environmental labels and declarations - Type III environmental declarations"	

LCA compliant with ISO 14040:2006: "Environmental management – LCA – Principles and framework"
LCA compliant with ISO 14044:2006: "Environmental management – LCA – Requirements and guidelines"
Environmental data in alignment with EN 15804:2012 + A2:2019: "Sustainability of construction works - EPD's - Core rules for the product category of construction products"