

# Product Environmental Profile

## Linkeo DC Cabinet



### 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.).



### REFERENCE PRODUCT

<p><b>Function</b></p>	<p>Protect the people direct contact with live parts and allow grouping monitoring, control and protection devices in a single enclosure or a cabinet having the following dimensions 600x1000x2052 mm, while protecting against mechanical impacts IK 08 and the penetration of solid objects and liquids IP 20. this product has a life time of 20 years..</p>
<p><b>Reference Product</b></p>	<div style="text-align: center;">  </div> <p>Cat.No 446800 19" 42U server rack 2052x600x1000mm.</p>

The company reserves the right to change specifications and designs without notice. All illustrations, descriptions, dimensions and weights in the document are for guidance and cannot be held binding on the company.



### PRODUCTS CONCERNED

The environmental data is representative of the following products:

<p><b>Catalogue Numbers</b></p>
<p>• 446800;446801;446802;446803;446804;446805;446806;446807;446820;446821;446823;446824;446825;446826;446827</p>



### ■ 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.

<b>Total weight of Reference Product</b>	<b>115,900 g</b> (all packaging included)				
<b>Plastics as % of weight</b>		<b>Metals as % of weight</b>		<b>Other as % of weight</b>	
PA	<b>0.2 %</b>	Steel	<b>88.3 %</b>		
		Copper alloys	<b>&lt;0.1 %</b>		
Other plastics	<b>0.03 %</b>				
<b>Packaging as % of weight</b>					
				Wood	<b>9.5 %</b>
				Paper	<b>1.9 %</b>
<b>Total plastics</b>	<b>0.3 %</b>	<b>Total metals</b>	<b>88.3 %</b>	<b>Total others</b>	<b>11.4 %</b>

Estimated recycled material content: 33 % by mass.



### ■ MANUFACTURE

This Reference Product comes from sites that have received ISO14001 certification.



### ■ DISTRIBUTION

Products are distributed from logistics centres located with a view to optimize transport efficiency. The Reference Product is therefore transported over an average distance of 780 by road from our warehouse to the local point of distribution into the market Europe.

Packaging is compliant with european directive 2004/12/EU concerning packaging and packaging waste. At their end of life, its recyclability rate is 96 % (in % of packaging weight).



### ■ INSTALLATION

For the installation of the product, only standard tools are needed.



### ■ USE

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



### END OF LIFE

The product end of life factors are 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.

**• Recyclability rate:**

Calculated using the method described in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 99 %. This value is based on data collected from a technological channel operating on an industrial basis. It does not pre-validate the effective use of this channel for the end of life of this product.

Separated into:

- plastic materials (excluding packaging) : 0 %
- metal materials (excluding packaging) : 88 %
- other materials (excluding packaging) : 0 %
- packaging (all types of materials) : 11 %



### 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 products marketed and used in Europe, in compliance with the local current standards.

For each phase, the following modelling elements were taken in account:

Unless otherwise specified, the energy models are those integrated in the modules used from the EIME database	
<b>Manufacture</b>	Materials and components of the product, all transport for the manufacturing, the packaging and the waste generated by the manufacturing.
<b>Distribution</b>	Transport between the last Group distribution centre and an average delivery point in the sales area.
<b>Installation</b>	The end of life of the packaging.
<b>Use</b>	<ul style="list-style-type: none"> <li>• Product category: envelope.</li> <li>• Use scenario: no energy consumption during the 20 years working life. This modelling duration does not constitute a minimum durability requirement .</li> </ul>
<b>End of life</b>	The default end of life scenario maximizing the impacts.
<b>Software and database used</b>	EIME & database CODDE-2018-11

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### SELECTION OF ENVIRONMENTAL IMPACTS

	Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
	Value	Unit	Value	%	Value	%	Value	%	Value	%	Value	%
<b>Global warming</b>	4.31E+02	kgCO <sub>2</sub> eq.	4.19E+02	97%	4.50E+00	1%	6.87E-01	< 1%	0.00E+00	0%	6.61E+00	2%
<b>Ozone depletion</b>	3.27E-05	kgCFC-11 eq.	3.27E-05	100%	9.12E-09	< 1%	2.06E-09	< 1%	0.00E+00	0%	4.29E-08	< 1%
<b>Acidification of soils and water</b>	1.18E+00	kgSO <sub>2</sub> eq.	1.12E+00	96%	2.02E-02	2%	3.15E-03	< 1%	0.00E+00	0%	2.80E-02	2%
<b>Water eutrophication</b>	1.84E-01	kg(PO <sub>4</sub> ) <sup>3-</sup> eq.	1.31E-01	71%	4.65E-03	3%	1.30E-03	< 1%	0.00E+00	0%	4.67E-02	25%
<b>Photochemical ozone formation</b>	1.49E-01	kgC <sub>2</sub> H <sub>4</sub> eq.	1.45E-01	97%	1.44E-03	< 1%	2.23E-04	< 1%	0.00E+00	0%	2.10E-03	1%
<b>Depletion of abiotic resources - elements</b>	6.16E-04	kgSb eq.	6.15E-04	100%	1.80E-07	< 1%	2.80E-08	< 1%	0.00E+00	0%	2.78E-07	< 1%
<b>Total use of primary energy</b>	1.95E+04	MJ	1.94E+04	99%	6.36E+01	< 1%	9.66E+00	< 1%	0.00E+00	0%	8.27E+01	< 1%
<b>Net use of fresh water</b>	2.01E+01	m <sup>3</sup>	2.01E+01	100%	4.03E-04	< 1%	9.27E-05	< 1%	0.00E+00	0%	1.71E-03	< 1%
<b>Depletion of abiotic resources - fossil fuels</b>	4.30E+03	MJ	4.15E+03	96%	6.32E+01	1%	9.56E+00	< 1%	0.00E+00	0%	8.08E+01	2%
<b>Water pollution</b>	2.52E+04	m <sup>3</sup>	2.34E+04	93%	7.40E+02	3%	1.12E+02	< 1%	0.00E+00	0%	9.43E+02	4%
<b>Air pollution</b>	6.75E+04	m <sup>3</sup>	6.69E+04	99%	1.84E+02	< 1%	4.01E+01	< 1%	0.00E+00	0%	3.76E+02	< 1%

The values of the 27 impacts defined in the PCR-ed3-EN-2015 04 02 are available in the digital database of pep-ecopassport.org website.

For all products concerned (see § «products concerned»), take these impacts values.


The reference product : 446800					
19inches complete server cabinet Linkeo Data Center 42U - 2052x600x1000mm					
Coefficient of extrapolation of environmental indicators					
Associated References	Manufacturing	Distribution	Installation	Use	End of life
446801 Capacity 42U, dimensions (H*I*L) : 2052 x 600 x 1200mm			1.16		
446802 Capacity 42U, dimensions (H*I*L) : 2052 x 800 x 1000mm			1.34		
446803 Capacity 42U, dimensions (H*I*L) : 2052 x 800 x 1200mm	GWP		1.40		
446804 Capacity 47U, dimensions (H*I*L) : 2274x600x1000mm	ODP		1.20		
446805 Capacity 47U, dimensions (H*I*L) : 2274x600x1200mm	A		1.34		
446806 Capacity 47U, dimensions (H*I*L) : 2274 x 800 x 1000mm	EP		1.35		
446807 Capacity 47U, dimensions (H*I*L) : 2274 x 800 x 1200mm	POCP		1.56		
446820 Capacity 42U, dimensions (HxLxP): 2052 x 600 x 1000 mm	ADPe		0.88		
446821 Capacity 42U, dimensions (H*I*L) : 2052 x 600 x 1200mm	PE		1.00		
446823 Capacity 42U, dimensions (H*I*L) : 2052 x 800 x 1000mm	FW		1.10		
446824 Capacity 42U, dimensions (H*I*L) : 2052 x 800 x 1200mm	ADPf		1.10		
446825 Capacity 47U, dimensions (H*I*L) : 2274x600x1000mm	WP		0.85		
446826 Capacity 47U, dimensions (H*I*L) : 2274x600x1200mm	AP		1.04		
446827 Capacity 47U, dimensions (H*I*L) : 2274x600x1200mm			1.07		
			1.31		

Contact Legrand if you have any questions regarding the calculation of coefficients for impacts others than those presented in this PEP

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Registration number: LGRP-01457-V01.01-EN	Drafting rules: «PEP-PCR-ed3-EN-2015 04 02» Supplemented by PSR-0005-ed2.0-EN-2016 03 29
Verifier accreditation N°: VH18	Information and reference documents: <a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
Date of issue: 11-2021	Validity period: 5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010 Internal <input type="checkbox"/> External <input checked="" type="checkbox"/>	
The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)	
PEP are compliant with XP C08-100-1 : 2016 The elements of the present PEP cannot be compared with elements from another program	
Document in compliance with ISO 14025 : 2010: «Environmental labels and declarations. Type III environmental declarations»	
Environmental data in alignment with EN 15804: 2012 + A1 : 2013	