

# Product Environmental Profile

NikyS Line Interactive UPS  
3 kVA with IEC multi-socket outlets




## LEGRAND'S ENVIRONMENTAL COMMITMENTS

- Incorporate environmental management into our industrial sites  
Of all Legrand sites worldwide, over 80% are ISO 14001-certified (sites belonging to the Group for more than five years)..
- Involve the environment in product design  
Provide our customers with all relevant information (composition, consumption, end of life, etc.).  
Reduce the environmental impact of products over their whole life cycle..
- Offer our customers environmentally friendly solutions  
Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.



## REFERENCE PRODUCT

<b>Fonction</b>	To protect the load up to 1800 Watts against input power failure during 8 years and provide a backup time of 5 minutes for a typical application in case of a power outage. Product dimensions is 169x242x464 AxLxP (mm)
Reference Product	 <p style="text-align: center;">Catalogue Numbers 310008</p> <p style="text-align: center;">NikyS Line Interactive UPS - Single phase VI-SS- 3kVA with IEC multi-socket outlets</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 for the reference product refers to the following Catalogue Numbers:

<b>Références</b>
310008

# Product Environmental Profile

NikyS Line Interactive UPS  
3 kVA with IEC multi-socket outlets



## ■ CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It does not contain substances covered by the RoHS Directive (2002/95/EC and its revision 2011/65/EC). It contains none of the 138 substances in the candidate list of the REACH regulation dated 19/12/2012

Total weight of Reference Product		24000 g (with unit packaging)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	1.4%	Steel	15.4%	Batteries	39.7%
PA	1.4%			Other electronic components	27.8%
				PWB	5.3%
				Electric cables	0,9%
				LCD srceen	0,4%
				Led	<0,1%
				Packaging as % of weight	
				paper	5.7%
				PS	2.0%
				PE	<0.1%
Total plastics	2.8%	Total metals	15.4%	Total other and packaging	81.8%

Estimated recycled material content: 39% by mass.



## ■ MANUFACTURE

This Reference Product comes from a site that have received ISO14001 certification. Location of the manufacturing plant in China.



## ■ 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 km by road from our warehouse to the local point of distribution into the market in Europe.

Packaging is compliant: European directive 2004/12/EC concerning packaging and packaging waste.

At the packaging end of life, its recycling rate is of 73% (in % of the mass of the packaging)



## ■ INSTALLATION

Installation components not delivered with the product are not taken into account.



## ■ USE

Servicing and maintenance:

Under normal conditions of use, this type of Product requires maintenance during the lifetime of the UPS : 1 AC&DC Capacitors of filtering and 1 Power supply PCB and 1 battery (Lead acid)

Consumable

The product has a battery Lead Acid. No battery change during use



### END OF LIFE

Product end of life management is integrated into product design by the development teams. The 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.

- Elements to process specifically

This product falls within the scope of the WEEE directive (2012/19/EU). Therefore it must be processed through local WEEE recovery/recycling channels. 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 :

Lead accumulators\* : 9600g

PWB > 10cm<sup>2</sup> : 1287g

(\*) Hazardous waste as defined by European Commission decision 2000/532/EC.

- End-of-life channel

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.

This product contains a lead-acid battery that must be removed and treated in local industries approved under Directive battery.

- Recyclability rate

Calculated using the method described in the IEC/TR 62635 technical report, the recyclability rate of the product is estimated as 47%. This value is based on data collected from a technological channel using industrial procedures. It does not pre-validate the effective use of this channel for end-of-life electrical and electronic products.

Separated into:

- Plastic materials (excluding packaging) : 3%
- Metal materials (excluding packaging) : 15%
- Other materials (excluding packaging) : 23%
- Packaging (all types of materials) : 6%



### 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. The following modelling elements were taken into account:

Manufacture	Unit packaging taken in account. As required by the "PEP ecopassport" programme all transports for the manufacturing of the Reference Product, including materials and components, has been taken in account.
Distribution	Transport between the last Group distribution centre and an average delivery to the sales area
Installation	Installation components not delivered with the product are not taken into account.
Use	<ul style="list-style-type: none"> <li>• Under normal conditions of use, this type of Product requires maintenance during the lifetime of the UPS : 1 AC&amp;DC Capacitors of filtering and 1 Power supply PCB and 1 battery (Lead acid)</li> <li>• The product has a battery Lead Acid. No battery change during use</li> <li>• Product category : product with output power 1500 &lt; P &lt; or = 5000 W as described in PSR-0010-ed1-EN-2014 02 11</li> <li>• Use scenario : for a 8 years working life, The average energy efficiency is 94.7 %. This modelling duration does not constitute a minimum durability requirement. The methodology for the calculation of the electricity consumption is based on the ENERGY STAR® Program Requirements Product Specification for Uninterruptible Power Supplies (UPSs), Eligibility Criteria Version 1.0. Input power factor is &gt; 0.6 and redundancy : UPS that cannot tolerate any failures while maintaining Normal Mode operation. No redundancy.</li> <li>• Energy model: Electricity Europe 2002</li> </ul>
End of life	In view of the data available on the date of creation of the document, and in accordance with the requirements of the PCR of the «PEP ecopassport» programme, transport of the Reference Product by road only once, over a distance of 1000 km, to a processing site at end of life was counted.

# Product Environmental Profile

## NikyS Line Interactive UPS 3 kVA with IEC multi-socket outlets



### ENVIRONMENTAL IMPACTS (continued)

		Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
Mandatory indicators	Contribution to greenhouse effect	3.30E+06	g~CO2	3.77E+05	11%	2.34E+03	< 1%	0.00E+00	0%	2.92E+06	88%	1.47E+03	< 1%
	Damage to the ozone layer	7.42E-01	g~CFC-11	7.65E-02	10%	1.65E-03	< 1%	0.00E+00	0%	6.64E-01	89%	2.79E-06	< 1%
	Eutrophisation of water	8.13E+01	g~PO43-	5.35E+01	66%	3.89E-02	< 1%	0.00E+00	0%	2.77E+01	34%	2.74E-03	< 1%
	Photochemical ozone formation	2.77E+02	g~C2H4	9.48E+01	34%	2.03E+00	< 1%	0.00E+00	0%	1.80E+02	65%	3.29E-01	< 1%
	Acidification of the air	7.09E+02	g~H+	7.86E+01	11%	2.98E-01	< 1%	0.00E+00	0%	6.29E+02	89%	2.74E-01	< 1%
	Total energy consumed	6.49E+04	MJ	5.82E+03	9%	2.96E+01	< 1%	0.00E+00	0%	5.90E+04	91%	2.08E+01	< 1%
	Consumption of water	1.15E+04	dm3	3.87E+03	34%	2.80E+00	< 1%	0.00E+00	0%	7.60E+03	66%	1.53E-01	< 1%

Optional indicators	Depletion of natural resources	3.64E-11	années <sup>-1</sup>	3.63E-11	100%	4.03E-17	< 1%	0.00E+00	0%	3.93E-14	< 1%	3.01E-17	< 1%
	Toxicity of the air	8.66E+08	m <sup>3</sup>	1.35E+08	16%	4.40E+05	< 1%	0.00E+00	0%	7.30E+08	84%	4.07E+05	< 1%
	Toxicity of the water	1.37E+03	dm <sup>3</sup>	7.23E+01	5%	3.26E-01	< 1%	0.00E+00	0%	1.30E+03	95%	6.30E-01	< 1%
	Production of hazardous waste	5.45E+00	kg	4.95E+00	91%	8.70E-04	< 1%	0.00E+00	0%	5.00E-01	9%	1.83E-06	< 1%

The environmental impacts of the Reference Product are representative of the products covered by the PEP.

The values of these impacts are valid for the context specified in this document. They must not be used directly to draw up the environmental balance sheet for the installation.

Registration number: LGRP-2015-314-v1-en	Drafting rule: PEP-PCR-ed 2.1-FR-2012 12 11 and PSR-0010-ed1-EN-2014 02 11
Authorisation number of checker: VH02	Programme information: <a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
Date of issue: 11-2015	Validity period: 4 years
Independent verification of the declaration and data, in accordance with ISO 14025:2006 Internal <input checked="" type="checkbox"/> External <input type="checkbox"/>	
In accordance with ISO 14025 :2006 Type III environmental declaration	
The critical review of the PCR was conducted by a panel of experts chaired by J.Chevalier (CSTB)	
The elements of the present PEP cannot be compared with elements from another programme	

