BTicino SpA
Viale Borri, 231
21100 Varese - Italy

Your usual Sales office
www.bticino.it

Product Environmental Profile

One family - 2 wire expandable kit with SWING Basic B/W video handset and SFERA Classic A/V pushbutton panel

PEP ecopassport®

BTICINO'S ENVIRONMENTAL COMMITMENTS

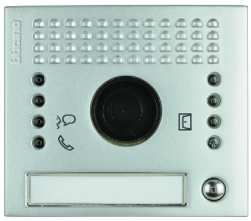
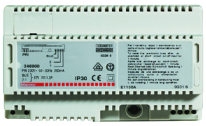
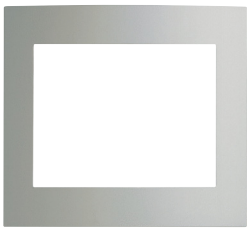
Home automation, high range civil installation and canalisation systems are types of products in which BTicino excels on the Italian market. BTicino, as a responsible producer, adopts an environmental policy declined according to three axes:

• Incorporate environmental management into our industrial sites
BTicino is concerned with the protection and preservation of the environment from the manufacture of its products.
For this reason, all sites are ISO 14001 certified or committed to implementation of a environmental responsible management policy.

• Involve the environment in product design
A product generates environmental impacts throughout its whole life cycle. For this reason, BTicino is committed to minimize the environmental impact of its products and provides its customers all relevant information (composition, consumption, end of life ...).

• Offer our customers environmentally friendly solutions
BTicino offers to its customers solutions to reduce the energy and environmental impact of commercial, residential and industrial buildings: solutions that allow to consume less energy in according to the real needs.

REFERENCE PRODUCT

Function	The audio/video system is a «2-wire» door entry systems for the residential and small service sectors. Supplied in KIT, it allows to communicate between outside and inside, showing external entry and permitting the lock release. PCR category: active product. Life span considered for the study: 10 years.		
Reference Products			
	BT-344832 2 WIRE basic video handset	BT-346830 Video adapter	BT-342560 + BT-342471 AV module + Front panel
			
	BT-331110 Flush mounting box 1 Mod	BT-346000 Power supply	BT-331211 Metal frame Sfera Classic

CONCERNED PRODUCTS

The environmental data represent the following Catalogue Numbers:

- **BT-366311**

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CONSTITUENT MATERIALS

This product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. At the date of publication of this document, this product contains no substances to which the RoHS directives apply (2002/95/EC and review 2011/65/EC) and none of the 144 candidate substances covered by appendix XIV of the REACH regulation dated 20/06/2013.

Total weight of Reference Products:	**4147 g** (unit packaging included)

Plastics as % of weight		**Metals as % of weight**		**Other as % of weight**	
ABS	9,9 %	Steel	6,7 %	Electronic cards	27,4 %
Polycarbonate	6,7 %	Aluminium	1,5 %	Cathode ray tube	13,0 %
Polystyrene	2,8 %	Copper alloys	0,8 %	Other electronic components	2,7 %
Polyamide	0,5 %			Electric wires	1,5 %
SBS rubber	0,2 %			**Packaging as % of weight**	
Other plastics	0,2 %			Paper / Cardboard	25,8 %
				Polyetylene (LDPE)	0,3 %
Total plastics	**20,3 %**	**Total metals**	**9,0 %**	**Total other and packaging**	**70,7 %**

Estimated recycled material content: 28 % by weight

MANUFACTURE

These products come from sites that have received ISO 14001 certification.

DISTRIBUTION

The Group's products are distributed from logistics centres located to optimize transport efficiency.

The Reference Product is therefore transported over an average distance of 780 km, essentially by road, representing a marketing in Europe.

At the packaging end of life, its recycling rate is of 99 % (as % of packaging weight).

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 no servicing or maintenance.

Consumable
No consumables are necessary to use the products.

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END OF LIFE

Development teams integrate product end of life factor in 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.

• Components to process specifically:

This product enters into the field of application of WEEE (2002/96/EC). It must therefore be processed through local WEEE end-of-life channels. In accordance with the stipulations of this directive, the following components must be extracted and processed via specific channels in compliance with the Waste Directive 2008/98/EC:

- electronic cards more than 10 cm^2: 1127 g
- external electric wires: 33 g

Hazardous waste as defined by European Commission decision 2000/532/EC:

- cathode ray tube: 538 g

• 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.

• Recyclability rate:

Calculated using the method described in the IEC/TR 62635 technical report, the recyclability rate of the product is estimated as 71 %. This value is based on data collected from a technological channel using industrial procedures. It does not presume the effective use of this channel for end-of-life electrical and electonic products.

Separated into:

- Plastic materials (excluding packaging): 19 %
- Metal materials (excluding packaging): 9 %
- Other materials (excluding packaging): 17 %
- Packaging (all types of materials): 26 %

ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end of life of the product 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	• Maintenance: under normal conditions of use, this type of product requires no servicing or maintenance. No consumables are necessary to use the product. • Product category: active product. • Use scenario: ten-year working life. Stand-by mode power: 5,1 W for 99 % of the time; active mode power: 22,5 W for 1 % of the time. This modelling duration does not constitute a minimum durability requirement. • Energy model: Electricity Europe 2005.
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, was counted transport of the Reference Product by road only once, over a distance of 1000 km, to a processing site at end of life.
Software used	EIME V5 and its database «Legrand-2012-10-31 version 3» developed from database «CODDE-2012-07».

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ENVIRONMENTAL IMPACTS

		Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
Mandatory indicators	Contribution to greenhouse effect	**2.99E+05**	g~CO_2 eq.	3.57E+04	**12%**	4.12E+02	**<1%**	0.00E+00	**0%**	2.62E+05	**88%**	3.17E+02	**<1%**
	Damage to the ozone layer	**2.32E-02**	g~CFC-11 eq.	8.40E-03	**36%**	2.92E-04	**1%**	0.00E+00	**0%**	1.43E-02	**62%**	2.25E-04	**<1%**
	Eutrophisation of water	**4.48E+00**	g~PO_4^{3-} eq.	3.85E+00	**86%**	6.88E-03	**<1%**	0.00E+00	**0%**	6.17E-01	**14%**	5.29E-03	**<1%**
	Photochemical ozone formation	**1.04E+02**	g~C_2H_4 eq.	1.19E+01	**11%**	3.59E-01	**<1%**	0.00E+00	**0%**	9.18E+01	**88%**	2.76E-01	**<1%**
	Acidification of the air	**4.11E+01**	g~H^+ eq.	5.78E+00	**14%**	5.46E-02	**<1%**	0.00E+00	**0%**	3.52E+01	**86%**	4.20E-02	**<1%**
	Total energy consumed	**5.87E+03**	MJ	6.55E+02	**11%**	5.23E+00	**<1%**	0.00E+00	**0%**	5.20E+03	**89%**	4.02E+00	**<1%**
	Consumption of water	**1.11E+03**	dm^3	3.53E+02	**32%**	4.96E-01	**<1%**	0.00E+00	**0%**	7.52E+02	**68%**	3.81E-01	**<1%**
Optional indicators	Depletion of natural resources	**1.84E-13**	$years^{-1}$	1.79E-13	**97%**	7.12E-18	**<1%**	0.00E+00	**0%**	5.91E-15	**3%**	5.48E-18	**<1%**
	Toxicity of the air	**5.23E+07**	m^3	8.61E+06	**16%**	8.08E+04	**<1%**	0.00E+00	**0%**	4.35E+07	**83%**	6.21E+04	**<1%**
	Toxicity of the water	**9.04E+01**	m^3	1.50E+01	**17%**	5.76E-02	**<1%**	0.00E+00	**0%**	7.54E+01	**83%**	4.43E-02	**<1%**
	Production of hazardous waste	**4.95E+00**	kg	5.97E-01	**12%**	1.54E-04	**<1%**	0.00E+00	**0%**	4.36E+00	**88%**	1.18E-04	**<1%**

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-2013-103-v1-en	Drafting rule: PEP-PCR-ed2.1-FR-2012 12 11 and PSR-0005-ed1-FR-2012 12 11
Authorisation number of checker: VH02	Programme information: **www.pep-ecopassport.org**
Date of issue: November 2013	Validity period: 4 years
Independent verification of the declaration and data, in accordance with ISO 14025:2006 Interne ☒ Externe ☐	
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	