Environmental Product Declaration—EPD

Philips Digital Pocket Memo 9600/9620

This Environmental Product Declaration provides quantified environmental data and additional environmental information. The environmental data are based on critically reviewed Life Cycle Assessment result according to ISO 14040 series of standards.

Product Description

The Digital Pocket Memo® 9600/9620 is a handy, powerful and efficient device, comfortably to operate and offering latest recording technology with the 4-position switch. With the exchangeable Multimedia or SD-Cards, you have virtually unlimited recording time. Its ten user definable keywords allow easy file organization and archiving.

Voice files can be easily and quickly downloaded directly to your PC via a USB cable, the USB docking station or the optional LAN docking station for professional transcription.

The Digital Pocket Memo® is packaged with two rechargeable batteries, the external power supply unit, the USB docking station, the USB cable, the leather pouch, the quick reference guide, the SD memory card and the SpeechExec ProDictate, Philips' new dictation software that provides authors with easy-to-use functionality for organizing recordings. The software can also be configured to the user's preferences. Featuring a modern and intuitive user interface, authors can quickly and easily define urgent jobs and track work in progress.

The Digital Pocket Memo® 9600/9620 can be operated in three modes.

A The first modes consists of operating the Digital Pocket Memo LFH 9600/9620 with alkaline batteries. The information provided in this document for this mode is marked with "A"

B The second mode consists of operating the Digital Pocket Memo LFH 9600/9620 with rechargeable batteries and external power supply unit for recharging. The information provided in this document for this mode is marked with "B".

C This mode consists of operating the Digital Pocket Memo LFH 9600/9620 the with rechargeable batteries and charging via the USB docking station only. The external power supply unit is not used in this mode. The information provided in this document for this product variant is marked with "C".

Information about the manufacturer

PHILIPS Speech Processing has more than 50 years of experience in the professional market for Dictation devices. The headquarter as well as the development and the production is located in the High Tech Campus Vienna. The production in Vienna is meeting the ISO 9001 and ISO 14001 standard. Dedicated sales clusters located in every continent ensure that the customer base get the best commercial and technical support.

PHILIPS is also the leader in the IVA (International Voice Association) who defined the well established DigitalSpeechStandard (DSS), which is an important element for the interoperability in modern, professional and digital dictation environment. As a globally acting company PHILIPS has defined a public Sustainability Policy and has initiated a lot of activities to improve the portfolio.

PHILIPS

Description of the Life Cycle Stages and Life Cycle Data

The Life Cycle Data covers the life cycle stages as shown below.

Materials

This stage includes extraction of resources from nature, transport to the processing sites and then producing raw materials. For the supply parts additionally the manufacturing process, surface treatment and transport have been considered for this stage. Only materials exceeding 5g are shown here.

Materials	**[g]**
ABS	80,08
Aluminium	22,68
Copper	38,73
Glass	6,33
Leather	17,70
Paper	361,70
PC	19,60
Printed wire board	62,42
PVC	57,48
Steel	34,74

Manufacturing

This stage includes entire energy and processes materials needed for the assembly of the Digital Pocket Memo.
Recycling of the waste at the manufacturing site is considered.

Materials	**waste [g]**	**recycling**
Cardboard	47,28	-46,33
PET	17,10	-15,94
Energy	**[kWh]**	
Electricity	0,55	

Distribution

This stage includes the packaging and an average transport scenario to deliver the Digital Pocket Memo from the manufacturing site in Vienna to customers worldwide.

Materials	**[g]**
Cardboard	113,60
Paper	70,00
Transport	**[kgkm]**
Airplane	4142,7
Truck	2672,7

Use

For operation mode A this stage includes the consumption of alkaline batteries, for the operation mode one set of rechargeable batteries are needed additionally electricity to recharge the batteries. In this mode B also stand-by consumption of the external power supply unit is considered. For mode C one set of rechargeable batteries as well as electricity for charging are considered. In this mode no stand-by consumption occurs since the USB station is directly supplied from the PC or Laptop.

A

Materials	
Batteries	500 p
Energy	**[kWh]**
Electricity	0,0

B

Materials	
Batteries	2 p
Energy	**[kWh]**
Electricity	9,72

C

Materials	**[g]**
Batteries	2 p
Energy	**[kWh]**
Electricity	2,0

End of life

This stage includes recycling of materials, minimum 65% of the worn out Digital Pocket Memo according to the requirements of the WEEE-directive*. No energy for transport or recycling processes has been considered.

** DIRECTIVE 2002/96/EC on waste electrical and electronic equipment*

Materialrecycling	**[g]**
ABS	-78,48
Aluminium	-22,23
Copper	-37,96
Paper	-354,47
PC	-19,21
Steel	-34,05

Key Environmental Performance Indicators

The following Key Environmental Performance Indicators (KEPI) have been considered when developing the new Digital Pocket Memo .

Materials

❑ **Material consumption:** A development focus was to reduce the amount of materials and components (e.g. elimination of primary power cable)

❑ **Hazardous substances:**The Digital Pocket Memo is not containing hazardous substances according to RoHS directive. Supplier declarations for all used materials and components exist. Additional XRF sample testing is applied..

Manufacturing

❑ **Production waste:** The manufacturing site in Vienna meeting ISO 14001 standard and its environmental performance is monitored in the Philips EcoVison Program. Returnable packaging is used for regional suppliers.

Distribution

❑ **Packaging:** The packaging is made out of card board (≥80% recycling content) and its weight has been minimised. Only unbleached chlorine free paper is used for the packaging.

Use

❑ **Energy consumption:**
Significant energy saving has been realised due to interaction of State of the Art components and an improved firmware and energy management. This allows up to 17 hours dictation without recharging the batteries. The possibility to charge the rechargeable batteries also by connecting the device to USB helps to reduce Standby energy consumption.

mode	Energy supply	reduction
A	**Batteries only**	**-300 batteries**
B	**External charger**	**-68,4%**
C	**USB charging**	**-93,5%**

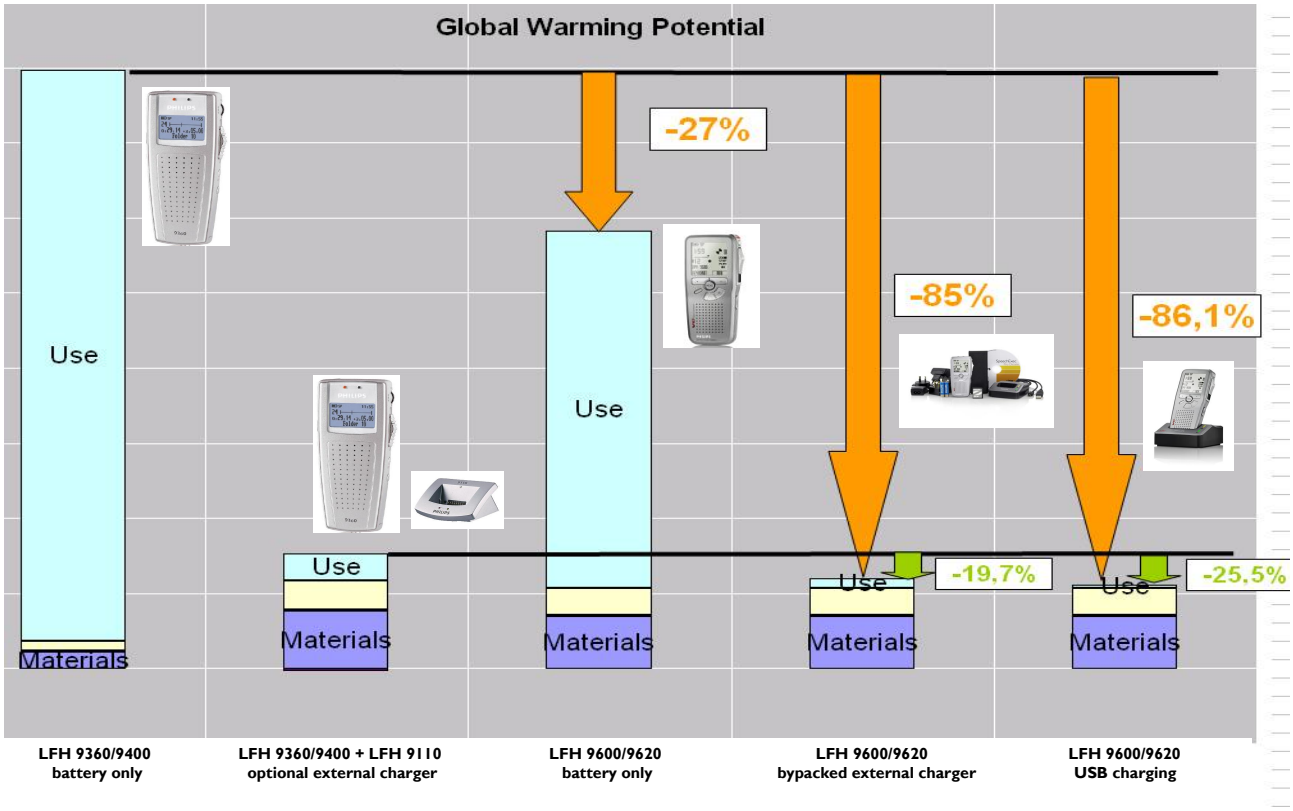
compared to previous model LFH 9360/9400

End of life

❑ **Recycling:** No compound materials are used in order to improve the recyclability of materials. After the end of life of the product the customers can either return the unit to the local recycling system for electronic equipment or send the unit back to Philips for recycling.

Overall improvements

The Life Cycle Assessment has been carried out in accordance with ISO 14040. Compared to the previous Digital Pocket Memo 9360 significant environmental improvements could be achieved with the new DPM 9600/9620. The Life Cycle Impact Assessment shows a significant reduction of the Global Warming Potential (GWP). Global warming is the rising of the global temperature due to emissions of greenhouse gases. Depending on the mode of operation up to 86,1% reduction of the GWP is possible.



Additional Environmental Information

It is recommended to use the Digital Pocket Memo with the bypacked rechargeable batteries in order to reduce the battery consumption during product use und therefore the global warming potential.
The Digital Pocket Memo meets the following standards:

EN 55 022 : 1998 + A1: 2000 (Emission)
EN 61000-3-2 : 2001 & EN 61000-3-3 : 1995 (Emission mains)
EN 55 024 : 1998 + A1: 2001 (Immunity)

Compilation and Verification

The Life Cycle Assessment for this Environmental Product Declaration has been performed by DI. Ratko Grab from Philips Austria. The verification of the Life Cycle Assessment results has been conducted by Prof. Dr. Kun Mo-Lee, ECODESIGN company, Seoul.
This Environmental Product Declaration has been developed by
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References

- ISO 14040, „Life Cycle Assessment“
- ISO 14025, "Environmental labels and declarations— Type III environmental declarations — Principles and procedures," 2006.
- W. Wimmer, R. Züst, and K.-M. Lee, *ECODESIGN Implementation - A Systematic Guidance on Integrating Environmental Considerations into Product Development*: Springer, 2004.

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