

AIRVITAMIN

Plasma electron spray
ionizer system



INTRODUCTION

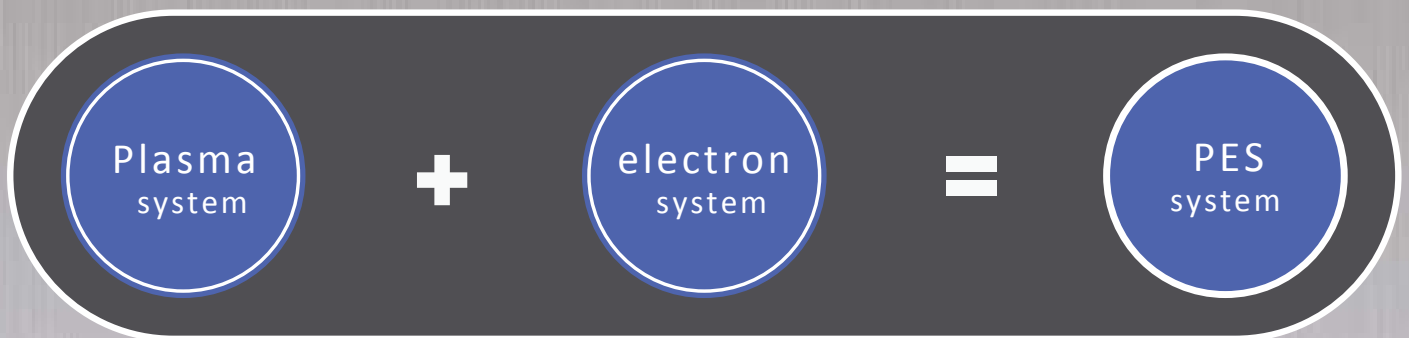
What is PES IONIZER SYSTEM?

PLASMA ELECTRON SPRAY IONIZER system.

Complex type of Plasma and Electron spray technologies to produce AIR-VITAMIN in the air.

(AIR-VITAMIN: ANION & ANTI-VIRUS ION)

PES IONIZER SYSTEM



Ionizer System is using combined Plasma & Electron Spray technology.

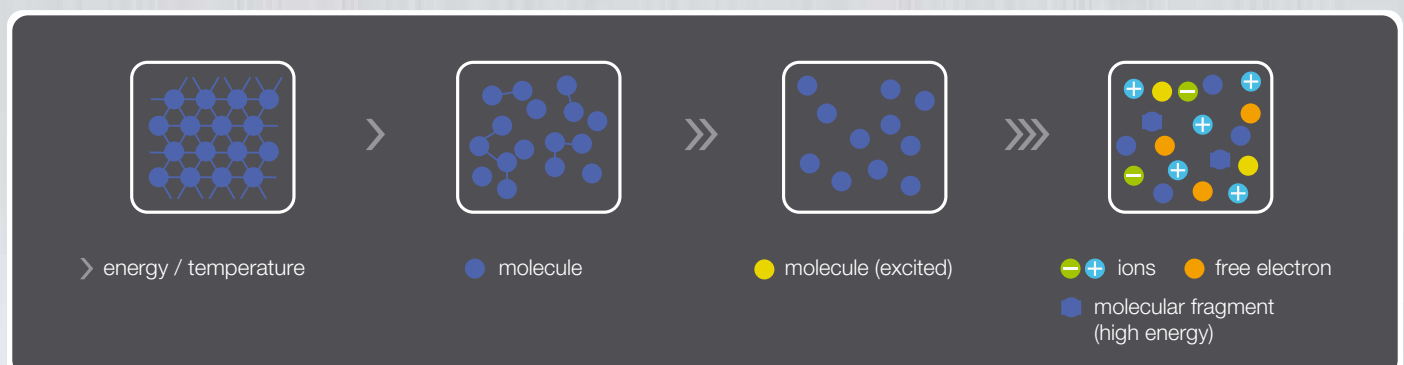
PLASMA TECHNOLOGY

Plasma is based on a simple physical principle. By supplying energy the state of matter changes: From solid to liquid and from liquid to gas.

If further energy is added to a gas it becomes ionized and passes over into plasma state.

Plasma system uses high voltage of pulse type as an energy and divides H₂O in the air into H⁺.OH⁻.
 $H_2O \rightarrow H^+(\text{Active hydrogen}) + OH^-(\text{Radical anion})$

Plasma technology

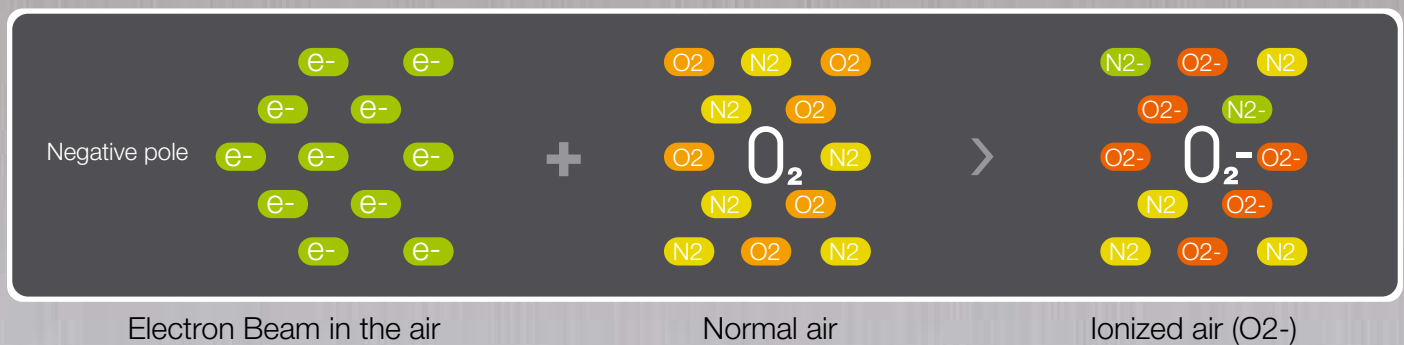


ELECTRON SPRAY TECHNOLOGY

The composition of air is N₂ 78%, O₂ 21%, small amounts of other gases 1%.
 O₂ has the most powerful electron affinity among the air composition.
 Electron Spray system emits electron beam to the air from the negative pole.

O₂ molecule in the air is merged with an electron
 O₂-O₂(Oxygen) + e⁻(electron) -> O₂⁻(Oxygen anion)

Electron-spray technology



Effects of AIR-VITAMIN (Anion & Anti-virus ion)

Anion (O₂⁻, OH⁻)

Purification of the air

Anions neutralize and precipitate positive ions, which are bad for human health (smoke, SO₂, NO_x, CO etc.)

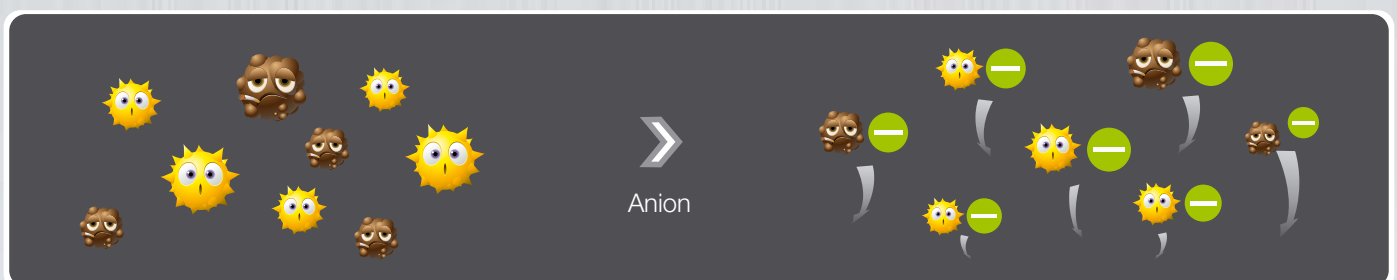
Promotion of health

Removes positive ions & raises activity of human body, purifies human blood, strengthens immune system and prevents respiratory-related illnesses. Natural anti-depressant helps to sleep better, reduces stress and prevents from electron waves. Anions protect you also from such illnesses as VDT syndrome and Sick Building Syndrome (SPS).

Anti-bacterial function

It sterilizes indoor bacteria, dust, pollen, mould and prevents their cultivation.

Anion (O₂⁻, OH⁻)



Dusts, Smoke, Pollen etc (positive ions)

Anions neutralize and precipitate positive ions

The role of AIR-VITAMIN (Anion & Anti-virus ion)

Anti-virus ion (O_3^+ , HOO^-)

Anti-bacterial, anti-virus effects of the air

Anti-virus ions eliminate spores, cysts, yeast and fungus.
They destroy bacteria, virus, mold and mildew.

Elimination of bad odors (Deodorization)

Removes indoor bad odors with the help of active oxygen (O_3^+) and anions.
This way it makes any place more comfortable.

Anti-virus ion (O_3^+ , HOO^-)



Air with bacteria, virus & bad odors

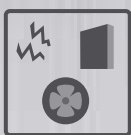
Healthy air with anions

FEATURES



Air purification

Quickly removes micro-dust, cigarette smoke, particles and pollens.
Removes bad odors and sterilizes viruses.



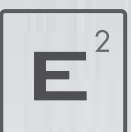
No fan, No noise, No filter

Product works quietly (under 25dB) because it uses indoor convection current and anion current to spread air-vitamins.
Product has no filters, so it is economic & easy to use without replacing filters.



Power Saving engineering

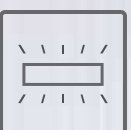
Power consumption of the device is very low.



Easy to Control and Effective Usage

Consumers can choose the mode depending on the environment, room or purposes by pushing the one-touch sensor button.

Modes: Electron spray mode / Electron spray+Plasma mode



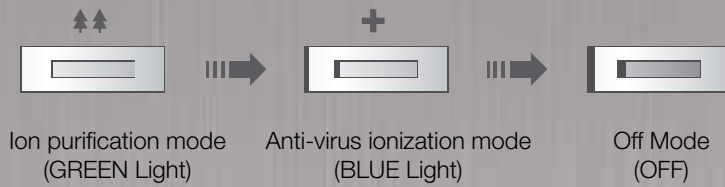
Mood Lamp light

Creates a romantic atmosphere in the room.

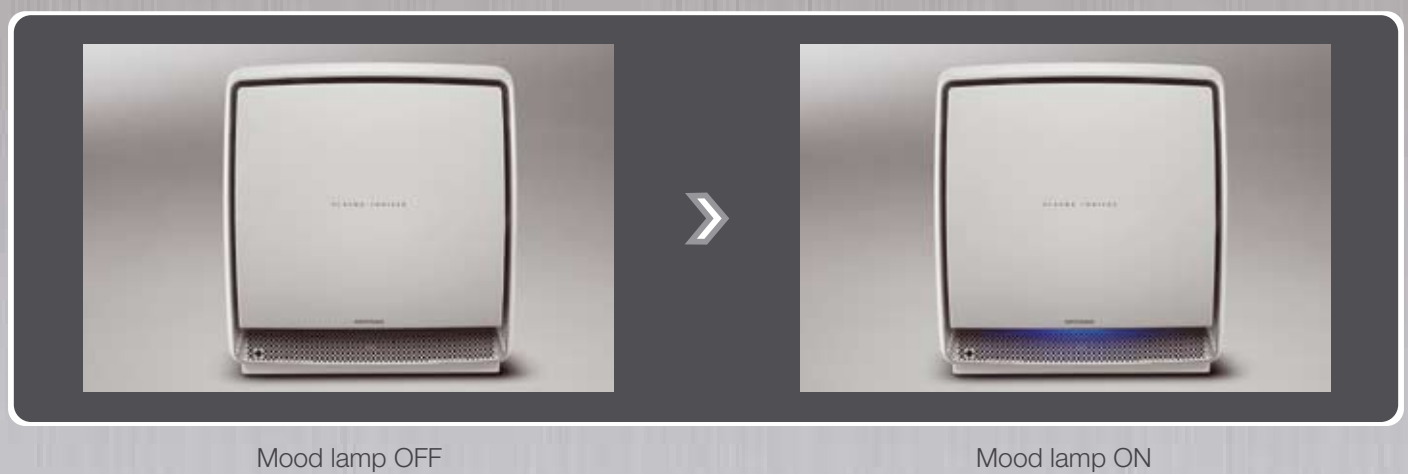
Innovative and Simple design

Mode

Ion purification mode (Electron spray) / Anti-virus ionization mode (Electron spray+Plasma)



Mood Lamp



Mood lamp OFF

Mood lamp ON



Mode :

Ion purification mode / Anti-virus ionization mode

Ion purification mode (O₂⁻) ↑↑

Places with bad ventilation or rooms with sick building syndrome (SPS).

To promote health of feeble persons or children.

Ex. bedrooms, rooms for allergic, living room, study room.

Anti-virus ionization mode (HOO⁻, O₃⁺) +

Places polluted with bad odors, smoke or pollen.

Ex. Bathroom, kitchen, smoking area, places with pets and underground facilities.

Places where harmful germs, fungus, virus, bacteria or yeast tend to breed easily.





CERTIFICATES AND TEST REPORTS

CE - complete



Date issued: November 10, 2009

CERTIFICATE No.: F89001SP-EMC000545



CERTIFICATE OF EMC COMPLIANCE

Order No: G-44-2009-02628
 Product submitted: IONIZER[PLASMA]
 Model: EUG-A1000
 Manufacturer: Eugene D&D, Inc.
 418, Doseon-dong, 14, Seongdong-gu, Seoul, 133-714, Korea

Testing Laboratory: SGS Lab. 23 - SGS Testing Korea Co., Ltd.

Test Report Number(s): F89001RF-EMC0002974
 Date of Receipt: September 30, 2009
 Date of Test: October 12, 2009 to November 04, 2009

Specification Requested: EN 55014-1:2006, EN 55014-2:1997(A1:2001) Category III
 EN 61000-3-2:2006, EN 61000-3-3:1995(A1:2001)A2:2005

Conclusion:
 The apparatus meets the requirements of the above standards and hence fulfills the requirements of Directive 2004/108/EC.

This certificate is only valid for the equipment and configuration described, in conjunction with the test data detailed above. It does not permit the use of the SGS PRODUCT CERTIFICATION MARK.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives.





Wonwoo Lee, Manager Eric Lee, General Manager

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Member of SGS Group (Swissair Générale de Surveillance) F890001



Date issued: November 10, 2009

CERTIFICATE No.: F89001SP-SAF900791



CERTIFICATE OF LVD COMPLIANCE

Product submitted: IONIZER[PLASMA]
 Model: EUG-A1000
 Rated Input: 100-240 V~, 50/60 Hz, 8 W

Applicant/Manufacturer: Eugene D&D, Inc.
 418, Doseon-dong, 14, Seongdong-gu, Seoul, 133-714, Korea

Testing Laboratory: SGS Testing Korea Co., Ltd.

Test Report Number(s): F89001RF-SAF003190
 Order Number(s): G-44-2009-02628

Specification Requested: EN 60335-2-65:2003 in conjunction with EN 60335-1:2002 + A1:2004 + A11:2004 + A12:2006 + A2:2006 and EN 50360:2003 + A1:2006

Conclusion:
 Based on a review of the test report, this apparatus meets the requirements of the above standards and hence fulfills the requirements of Directive 2006/95/EC.

This certificate is only valid for the equipment submitted and configuration described, in conjunction with the test data detailed above. It does not permit the use of the SGS PRODUCT CERTIFICATION MARK.

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Wonwoo Lee, Manager Eric Lee, General Manager

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Test-report



KICM

KOREA INSTITUTE OF CONSTRUCTION MATERIALS
 Add: 1480-4, Seocho-2Dong, Seocho-Ku, Seoul, Korea
 Tel: 3415-8980-81 Fax: 3415-8977 Url: www.kicm.co.kr

Certificate of Testing Result

Sample No. of Issue: H890014-PW003
 Name of Applicant: Hong, Eun-Ju (Eugene D&D)
 Address of Applicant: Station/Seochil Bld 403, Doseon-dong, Seongdong-gu, Seoul, Korea.
 Date of Receipt: Sep. 14, 2009
 Name of Test Sample: Ionizer-EUG-1000


Result of Testing

Test of Deodorization	
Gas	N ₂
Conc. of Blank (ppm)	1.0
Conc. of Test Sample (ppm)	0.5
Rate of Deodorization(%)	9.5
Test Method	Test Method of Provided by Applicant (refer to the attachment)

Object of test: Quality Control

1. This Test Report is the result of testing specimen and the name of sample provided by the applicant. But we do not guarantee the quality of entire product.
 2. This Test Report is not able to be public relation, advertisement, lawsuit without consent with KICM and this is not used except original purpose.
 3. The term of duplicate's issue is a half year from the date of issue. And the manuscript is invalidation.

Oct. 01 2009
 month day year
 Signed: *Bong Ki Moon*
 The general manager of Korea Institute of Construction Materials



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Certificate of Testing Result

Sample No. of Issue: H890014-PW004
 Name of Applicant: Hong, Eun-Ju (Eugene D&D)
 Address of Applicant: Station/Seochil Bld 403, Doseon-dong, Seongdong-gu, Seoul, Korea.
 Date of Receipt: Sep. 14, 2009
 Name of Test Sample: IONIZER-EUG-1000

Result of Testing

Item of test	Result of Testing			Test Method
	Early Conc. (CFU/100g)	After De. Conc. (CFU/100g)	Reduction rate of bacterial(%)	
Antibacterial test for <i>Escherichia coli</i>	BLANK	114.0	114.6	Client's requirement method
	IONIZER-EUG-1000	114.6	1	
Antibacterial test for <i>Salmonella typhimurium</i>	BLANK	117.5	117.5	Client's requirement method
	IONIZER-EUG-1000	117.5	1	

Test strains: *Escherichia coli* ATCC 29222
Salmonella typhimurium BO 14288

Object of test: Quality Control

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 month day year
 Signed: *Bong Ki Moon*
 The general manager of Korea Institute of Construction Materials

Test-report

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Add. : 140-4, Secho-3Dong, Secho-Ku, Seoul, Korea
Tel. : 3415-8980~81 Fax. : 3415-8977 Url : www.kicm.co.kr

Certificate of Testing Result

Sample No. of Issue : H00002-FW000
Name of Applicant : Hwang, Eui-Ju (Eugene Hwang)
Address of Applicant : Sinsan/Seokdal B/D 415, Daejeon-dong, Seongnam-si, Seoul, Korea
Date of Receipt : Sep. 02, 2009
Name of Test Sample : Inster(EG-A3000)

Result of Testing


Item	Test of Oxide Generation		
	Background Conc. (µm)	0.003	
Result	Final Conc. (ppm)	0.045	
	Oxide Generation (µm)	0.042	
Testing Method	Test Method of Provided by Applicant (refer to the attachment)		

-test-

* Object of test : Quality Control

1. This Test Report is the result of testing specimen and the name of sample provided by the applicant. But we do not guarantee the quality of entire product.
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month day year
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2-1 

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Tel. : 3415-8980~81 Fax. : 3415-8977 Url : www.kicm.co.kr

Certificate of Testing Result

Sample No. of Issue : H00002-FW000
Name of Applicant : Hwang, Eui-Ju (Eugene Hwang)
Address of Applicant : 130-711 Sinsan/Seokdal B/D 415, Daejeon-dong, Seongnam-si, Seoul, Korea
Date of Receipt : Sep. 2, 2009
Name of Test Sample : Inster(EG-A3000)


Result of Testing

Item	Result	Test Method
	Asion (DONCv)	
Sample	996400	

* Measure device : 30 mm
* Object of test : Quality Control

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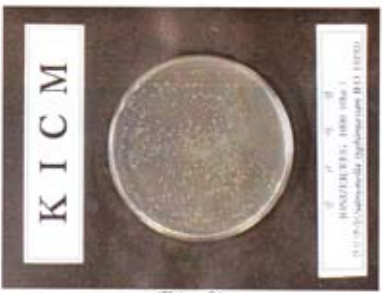
Sep. 02 2009
month day year
Signed : *Bong Ki Moon*
The general manager of Korea Institute of Construction Materials

1-1 


Test-report

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Add. : 140-4, Secho-3Dong, Secho-Ku, Seoul, Korea
Tel. : 3415-8980~81 Fax. : 3415-8977 Url : www.kicm.co.kr

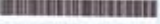
Sample No. of Issue : H00004-FW004



<Picture 3.>

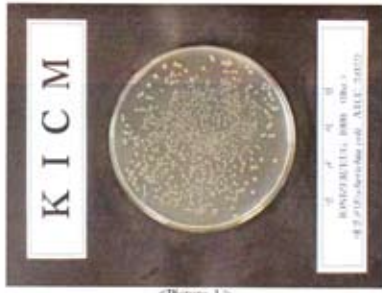


<Picture 4.>


4-3 

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Sample No. of Issue : H00004-FW004



<Picture 1.>



<Picture 2.>

4-2 

COLOR VARIATION

3 COLORS



White & silver



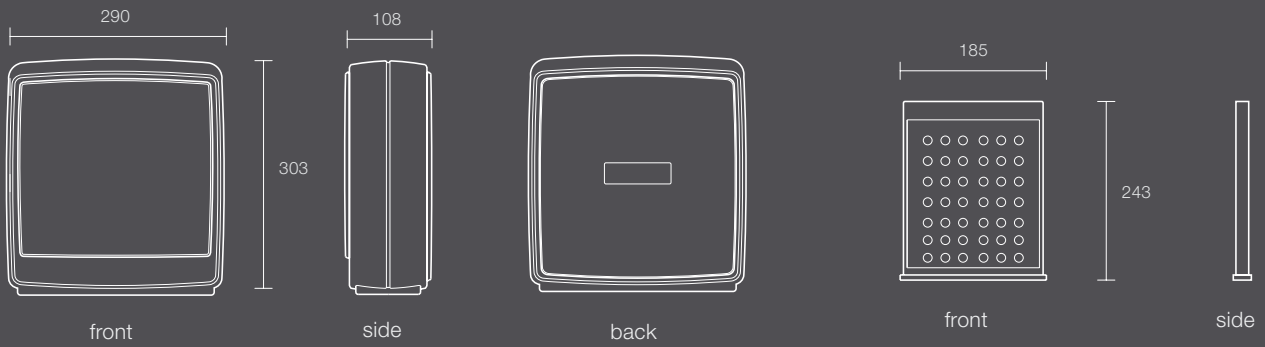
Black & dark silver



Black & wine

SPECIFICATION

Technical specifications



Product type : IONIZER [PLASMA]	Color : Black / White	Capacity:
Model name : EUG - A1000	Rated Voltage : 100-240 V~, 50/60 Hz	Electron spray mode 5-25m ²
Size : 290(W) * 303(H) * 108(D)	Power Consumption : 6 w	Electron spray+Plasma mode up to 58m ²
Weight : 2.84 kg		

Package

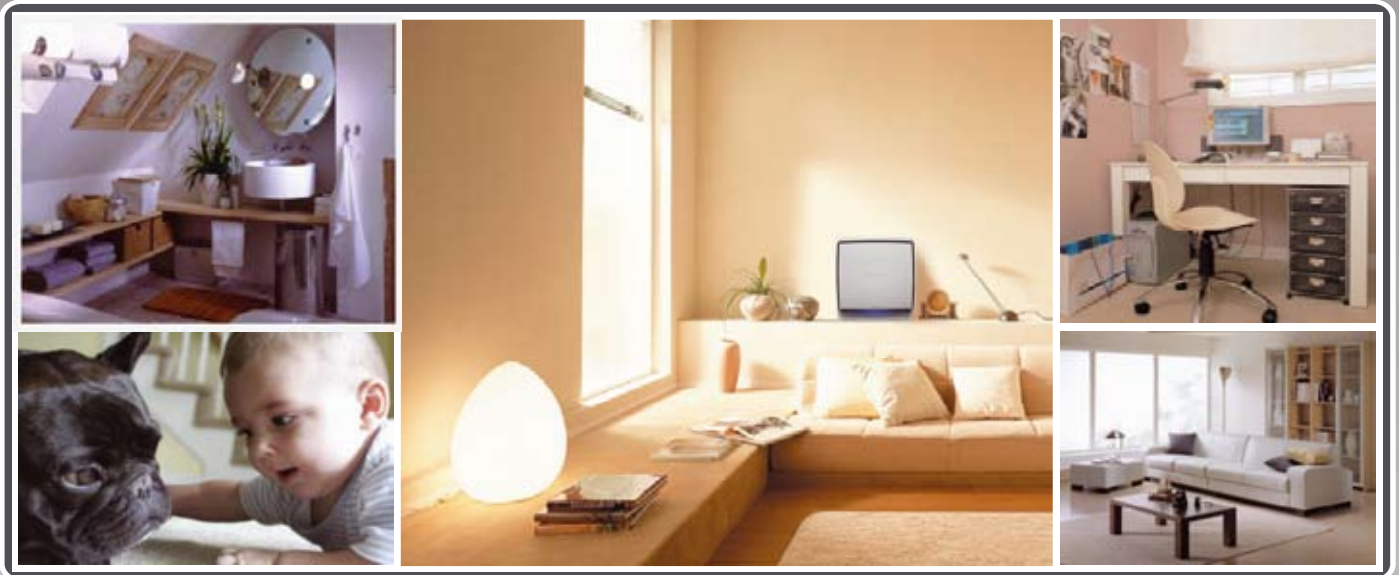
3D VIEW



Model name		EUG - A1000		Master carton (5 x EUG -A 1000)	
Picture		305 * 164 * 347 (mm)		845 * 325 * 358 (mm)	
Container Qty	20ft	1200	pcs	240	pcs
	40ft	2400	pcs	480	pcs
Euro Pallet		90	pcs	18	pcs



Various places of use



www.airvitamin.eu

AIRVITAMIN

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