



## BION Fit Spot Ionizer



**Date of issue: 19.5.2020**



## The operating instruction of BION Fit spot ionizer – air purifier

Contents of the manual Air purifier BION Fit spot

Brand: Geocore

Description and contents of the package

Technical information and basic settings

Authorized service of Air purifier: Geocore s.r.o.

Read this manual carefully before commissioning. Follow all safety and warning instructions and follow the recommendations given. The manual is an integral part of the Geocore product and in the event of the sale or relocation, should be provided with the product. Adherence to these operating instructions is a prerequisite for the protection of personal health and for the recognition of the manufacturer's liability for any product defects during the warranty period.

And don't forget - inappropriate use of the Geocore product significantly shortens service life!

### Description of product:

BION Fit spot ionizer – air purifier

BION Fit Spot ionizer destroy a wide range of dangerous microorganisms. Our ionizers meet all the demanding requirements of today. They do not only ionize the air, but they also purify it and get rid of pathogens and particles causing allergies. Because of the most advanced technology, ionizer adjust the air so much that you feel almost like in the nature. Ionization can run all day of course even though there are people in the room. It is certified product.

### Key features:

certified efficiency 99 %

easy operation

automatic power settings

Treat yourself to the clean and fresh air you deserve!

### Extended warranty:

Company Geocore s.r.o. provides an extended **five-year** warranty for air purifier. You can be sure that in case of damage or loss of functionality, you can claim the product for the entire warranty period.

### Technical parameters:

Bipolar ionization function

Produces  $10^{10}$  to  $10^{12}$  ions/s

Continuous measurement of ion concentration

Power cord with smooth control 180 cm

Air flow rate (m<sup>3</sup>/h):  $\geq 117$  m<sup>3</sup>/h (69 CFM)

Low operating noise:  $\leq 24.4$  dB (0.5 Sone)

Maximum space size: 15 m<sup>2</sup> / 45 m<sup>3</sup> to 30 m<sup>2</sup> / 90 m<sup>3</sup>

Ionizer power 12VDC  $\pm 10\%$  30mA, 0.36W

Fan power consumption 0.20A / + 12 V DC

Dimensions: approx. 12.2 x 12.2 x 29.5 cm (WxDxL)

Weight : 1,7 kgs


### Package contains:


Air ionizer

Transformer

Manual with Certificates and Warranty Certificate

### Safety regulations:

 Failure to observe these operating instructions will invalidate the warranty! We are not liable for any consequential damages that would result.

 We are not liable for damage to property, injuries to persons caused by improper handling of the device or non-compliance with the following safety regulations. In these cases, any warranty claim is void.

- For safety and registration (CE) reasons, it is forbidden to modify and / or modify the device (make changes to its internal wiring).

- Only a properly connected AC adapter with 240 V/ 50 Hz AC power can be used as a power source.



- This device may only be used in dry rooms. The device must not be damp or wet, as there is a risk of electric shock in these cases. The entire appliance must not come into contact with water or other liquids, therefore do not use this appliance in bathrooms, for example.
- Never touch the device with wet hands.
- This device is not a child's play and should not be placed in the hands of small children. Children can push various objects into the openings of the device and cause a life-threatening electric shock.
- After unpacking, check the device for transport damage. If you are not sure, do not continue to use the device and contact [e-shop@geocore.cz](mailto:e-shop@geocore.cz).

## The use:

- Connect the connector of the air purifier to a properly connected AC adapter with 240 V / 50 Hz.
- There is a rotary control on the cable with the "ON" position, which has a smooth control of 25-100% and the "OFF" position (turn off of device).
- If the product is placed on an uneven surface, you will ensure the stability of the ionizer with adjustable legs. Just tighten or fix the legs.

## Product cleaning:

If you place the air purifier at home, it is not necessary to use a filter.


We recommend using a filter if you will be using an air purifier in a dusty environment.

We recommend checking the purity of the product once every 14 days. Dust and dirt can accumulate inside of the machine and reducing the efficiency of air cleaning.

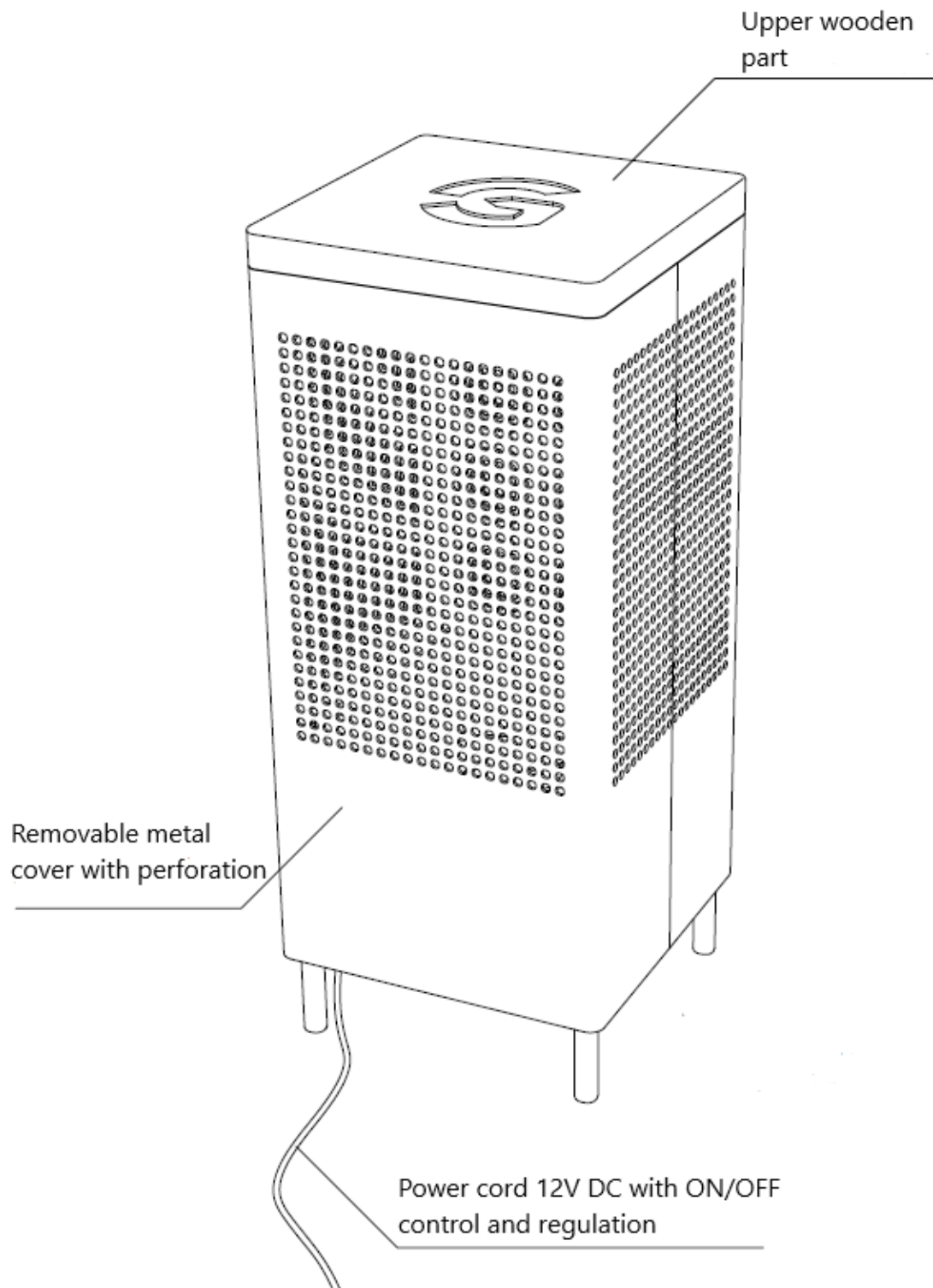
 Turn off the product and open it.

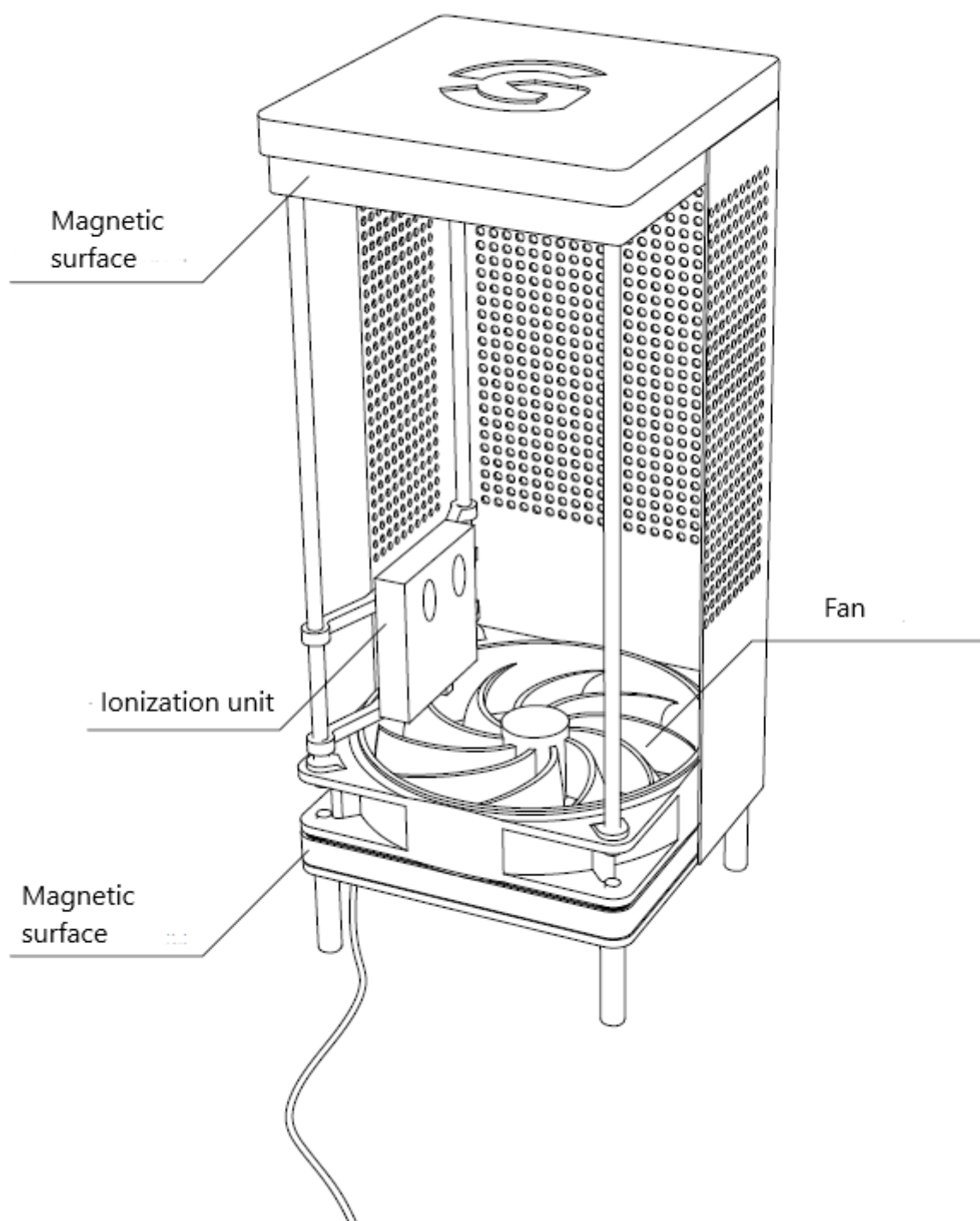
You can use a brush on dirt and dust, vacuum it carefully or use compressed air. If you use a filter, replace the filter with a new one if it is very dirty.

You can wipe the device with a damp soft cloth to avoid scratching the metal surface.

 Do not use any aggressive cleaning agents to clean the surface.

## Ionizer components:





## **Declaration of Conformity**

Issued pursuant to Section 13 of Act No. 22/1997 Coll. Government Regulation No. 163/2002 as amended (315/2005 Coll.)

### **Importer:**

GeoCore s.r.o., Jugoslavských partyzanu 736/34, 160 00 Prague 6, Czech Republic,  
Identification number: 28494393, VAT: CZ28494393

### **Producer:**

FILT AIR Ltd., 1 Avshalom Road, P.O.Box 166 Zikhron Yaaqov 3095101, Israel

### **declare, under our sole responsibility, that the product:**

Models: IS1-12DX-S1, IS1-12D3-S1, IS1-12D5-S1, IG3-025V-D633

### **herewith complies with the requirements of the EU directives:**

2014/35/EU - the low voltage directive (LVD)

2014/30/EU - electromagnetic compatibility (EMC)

### **applied standards:**

EN 60335-1

"Household and similar electrical appliances – Safety – Part 1: General Requirements", 2002, including Amendments A11: 2004, A1: 2004, A12: 2006, and A2: 2006

EN 60335-2-65

"Household and similar electrical appliances – Safety – Part 2-65: Particular requirements for air-cleaning appliances", 2003

EN 61000-6-3

"Electromagnetic Compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments" (2001): CISPR 22 Class B



#### EN 61000-6-1

“Electromagnetic Compatibility (EMC) – Part 6-1: Generic standards – Immunity for residential, commercial and light-industrial environments” (2001):

- clause 1.3 and IEC 61000-4-2;
- clause 1.2 and IEC 61000-4-3;
- clause 3.1 and IEC 61000-4-4;
- clause 3.4 and IEC 61000-4-6.

#### EN 61000-3-2 ED.4 (EMC)

Electromagnetic compatibility (EMC) - Part 3-2: Limits – Limits for harmonic current emissions (equipment input current  $\leq 16$  A per phase)

#### EN 61000-3-3 ED.3 (EMC)

Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current  $\leq 16$  A per phase and not subject to conditional connection

#### **other directives:**

2012/19/EU

On waste electrical and electronic equipment (WEEE).

2011/65/EU (RoHS 2)

On the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE).

#### **safety standards:**

UL 867 and C22.2 No. 187-09 – Electrostatic Air Cleaners

See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information.



## Certificates beyond possibilities of legally applied standards:

Substance	The name of the substance	Laboratory tested	Efficiency	Certified
Bacteria	Escherichia Coli	EMSL Analytical, USA	99%	2011
	Escherichia Coli ATCC	Istanbul University, Turkey	91%	2011
	Staphylococcus aureus	EMSL Analytical, USA	81%	2011
	Pseudomonas aeruginosa	Istanbul University, Turkey	99%	2011
	Staphylococcus aureus (MRSA)	EMSL Analytical, USA	99%	2013
Fungus	Aspergillus Niger	EMSL Analytical, USA	97%	2011
	Candida albicans	EMSL Analytical, USA	36%	2011
	Dichobotrys abundans	Prof. Joe F. Boatman, USA	90%	2006
	Penicillium	Prof. Joe F. Boatman, USA	95%	2006
Mold	Cladosporium cladosporioides	EMSL Analytical, USA	97%	2011
Spores	Bacillus subtilis var niger	Istanbul University, Turkey	89%	2011
Viruses	Influenza H1N1	Kitasato Research Center, Japan	99%	2011
	Influenza H5N1	Kasetsart University, Thailand	99%	2011

We have successfully passed laboratory testing and we can confirm that BION Fit Spot also eliminates the SARS COV 2 virus, causing the disease Covid – 19, with 99.9% efficiency.

Geocore s.r.o. has taken measures to ensure the conformity of all products placed on the market with the relevant technical documentation and with the essential requirements.

In Prague, dated 20.10. 2020

**GEOCORE**

**Geocore**

**s.r.o.**

A: Jugoslávských partyzánů 736/34  
160 00 Praha 6, Česká republika

E: [info@geocore.cz](mailto:info@geocore.cz)

W: [www.geocore.cz](http://www.geocore.cz)

IČO: 28494393 DIČ: CZ28494393

Reg.: Městský soud v Praze oddíl C, vložka 145694

Ing. Zdenek Matejovsky  
for company GeoCore s.r.o.

## Certificates:



The Standards Institution of Israel

This is to certify that:

Bipolar Ionizer

Trademark: STERIONIZER™

Models: IS1-12DX, IS1-12D3, IS1-12D5

Manufactured by: Filt-Air Ltd.

Address: 1 Avshalom Road, P.O.B. 166,  
Zichron Yaaqov 30951, Israel

has been tested by SII and found to comply with  
the standard requirements of:

EN 60335-2-65 "Household and similar electrical  
appliances – Safety – Part 2-65:  
Particular requirements for  
air-cleaning appliances", 2003

used in conjunction with

EN 60335-1 "Household and similar electrical  
appliances – Safety – Part 1:  
General Requirements", 2002,  
including Amendments A11: 2004,  
A1: 2004, A12: 2006, and A2: 2006

Test results are detailed in SII Test Report No.: 9012311173.

Certificate No.: 9012311173

Eng. Michael Terman

Date of issue: 10/03/2010

Acting Head of Electrical Safety Branch  
Electronics and Telematics Laboratory

42 Chaim Levanon st. Tel-Aviv 69977, Israel. Telematics Laboratory. Tel. 972-3-6467800 Fax: 972-3-6467779



THE STANDARDS INSTITUTION OF ISRAEL

Electronics & Telematics Laboratory

This is to certify that:

Equipment Under Test:

Bipolar Ionizer unit

Model: STERIONIZER™

Product Numbers: IS1 – 12D3. IS1 – 12D5

Tested: 30/04, 16/05/2007

Manufactured by: Filt Air Ltd.

Address: 1 Avshalom Road, P.O.Box 166,  
30951 Zichron Yaaqov, Israel

Has been tested by SII and was found to comply with the  
requirements of the following standards:

- ♦ EN 61000-6-3:  
"Electromagnetic Compatibility (EMC) -  
Part 6-3: Generic standards -  
Emission standard for residential, commercial and light-industrial  
environments" (2001):  
CISPR 22 Class B.
- ♦ EN 61000-6-1:  
"Electromagnetic Compatibility (EMC) -  
Part 6-1: Generic standards -  
Immunity for residential, commercial and light-industrial  
environments" (2001):  
- clause 1.3 and IEC 61000-4-2;  
- clause 1.2 and IEC 61000-4-3;  
- clause 3.1 and IEC 61000-4-4;  
- clause 3.4 and IEC 61000-4-6.

Test results are detailed in SII's Test Report No: **8712323329/1**.

Note: Certificate # 8812359483 has been superseded  
by the presented Certificate # 8712323329/1.

Certificate No.: 8712323329/1

Date of issue: 21 March 2010

Eng. Yuri Rozenberg

Head of EMC Branch

42 Chaim Levanon St. Tel-Aviv 69977 Israel. Management: Tel: 972-3-6467800 Fax: 972-3-6467779 www.sii.org.il  
Electronics: Tel: 972-3-6465050 Fax: 972-3-7454026 - Alarms Systems Section: Tel: 972-3-6465370 Fax: 972-3-6467262



The Standards Institution of Israel

This is to certify that:

Bipolar Ionizer

Trademark: STERIONIZER™

Model: IS1-12DX

Manufactured by: Filt-Air Ltd.

Address: 1 Avshalom Road, P.O.B. 166,  
Zichron Yaaqov 30951, Israel

has been tested by SII and found to comply with  
the standard requirements of:

EN 60335-2-65 "Household and similar electrical  
appliances – Safety – Part 2-65:  
Particular requirements for  
air-cleaning appliances", 2003

used in conjunction with

EN 60335-1 "Household and similar electrical  
appliances – Safety – Part 1:  
General Requirements", 2002,  
including Amendments A11: 2004,  
A1: 2004, A12: 2006, and A2: 2006

Test results are detailed in SII Test Report No.: 8712323327.

Certificate No.: 8712323327

Eng. Eli Vaknin

Date of issue: 1/08/2007

Head of Electrical Safety Branch  
Electronics and Telematics Laboratory

42 Chaim Levanon st. Tel-Aviv 69977, Israel. Telematics Laboratory. Tel. 972-3-6467800 Fax: 972-3-6467779



## CERTIFICATE OF COMPLIANCE

Certificate Number 20180622-E336892  
Report Reference E336892-20180618  
Issue Date 2018-JUNE-22

Issued to: FILT AIR LTD  
1 Avshalom Road,  
P.O. Box 166  
3095101 Zichron Yaaqov, ISRAEL

This is to certify that  
representative samples of

Power Supplies, Electrostatic Air-cleaning Equipment -  
Component  
Component – High Voltage Power Supply/Ionizing type  
module Sterionizer D6.

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 867, Standard for Safety for Electrostatic Air Cleaners.  
CSA Standard C22.2 No. 187, Electrostatic Air Cleaners.  
Additional Information: See the UL Online Certifications Directory at  
[www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's  
Certification and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog  
number, model number or other product designation as specified under "Marking" for the particular  
Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products  
that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark:  
"UL" may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is  
required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual  
recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance  
capabilities and are intended for use as components of complete equipment submitted for investigation rather  
than for direct separate installation in the field. The final acceptance of the component is dependent upon its  
installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.

*Eric M. Kelly*  
Eric M. Kelly, Director North American Certification Program

UL LLC  
Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please  
contact a local UL Customer Service Representative at [www.ul.com/customer-service](http://www.ul.com/customer-service)





HERMION LABORATORIES

## CERTIFICATE OF CONFORMITY

With IEC 60335-2-65:2002 + A1:2008 + C1:2004 + A2:2015 (Second Edition) in conjunction with IEC 60335-1:2010 (Fifth Edition) incl. Corr. 1:2010 and Corr. 2:2011 + A1:2013 + A2:2016 standard

Certificate Number FILSAF\_EN.30748C

This certificate of conformity has been granted to the applicant based on the results of tests and evaluations, performed by Hermion Laboratories from May 3 – 10, 2018 on a representative sample of the specified product.

### Product description

Tested item: Air purification device (D6 Series)  
Model: IG3-025V-D633  
Serial number: 101  
Hardware version: 5.0  
Software release: 2.7

### Applicant/Manufacturer details

Name: Fil Air Ltd.  
Address: Derech Avshalom 1, Zikhron Yaaqov, Israel  
Telephone number: +972 4 6107777  
Email: d.grau@fil-air.com

This is to certify that the tested product sample satisfies the requirements of the above listed standard's.

Measurement/test results are contained in the test report: FILSAF\_EN.30748.

The comments in the associated (if applicable) test report's shall be taken into account and used in conjunction with this certificate

*Michael Brun*

Michael Brun,  
Product Safety Group Manager  
Hermion Laboratories Ltd.

May 23, 2018

Page 1 of 1

### EXPERTS IN GLOBAL COMPLIANCE SOLUTIONS



Hermion Laboratories Ltd.  
Hatachana St., POB 23, Binyamina 30500 Israel  
Phone: +972 4 628 8001, Fax: +972 4 628 8277  
Email: mail@hermionlabs.com, www.hermionlabs.com



HERMION LABORATORIES

## CERTIFICATE OF CONFORMITY

With FCC 47CFR part 15: 2017, subpart B, Class B, ICES-003: 2016 Issue 6, Class B standards

With EN 61000-3-2: 2014, EN 61000-3-3: 2013 standards, harmonized under article 13 of EMC Directive 2014/30/EU  
With EN 55014-1: 2017, EN 55014-2: 2015, Category IV standards

Certificate Number FILEMC\_30748C

This certificate of conformity has been granted to the applicant based on the results of tests and evaluations, performed by Hermion Laboratories from March 27 to May 31, 2018 on representative sample of the specified product.

### Product description

Tested item: Air purification device (Ionizer)  
Trade Mark: **STERIONIZER™**  
Model: IG3-025V-D633  
Serial number: 101  
Hardware version: 5.0  
Software release: 2.7

### Applicant/Manufacturer details

Name: Fil Air Ltd.  
Address: Derech Avshalom 1, Zikhron Yaaqov, Israel  
Telephone number: +972 4 6107777  
Fax number: +972 4 6281110

This is to certify that the tested product sample satisfies the requirements of the above listed standards.

Measurement/test results are contained in the test report: FILEMC\_30748.

The comments in the associated (if applicable) test report's shall be taken into account and used in conjunction with this certificate

*Konstantyn Zaslachyk*

Konstantyn Zaslachyk,  
Projects & Customer Manager, EMC & Radio  
Hermion Laboratories Ltd.

July 17, 2018

Page 1 of 1

### EXPERTS IN GLOBAL COMPLIANCE SOLUTIONS



Hermion Laboratories Ltd.  
POB 23, Binyamina 3050001 Israel  
Phone: +972 4 628 8001, Fax: +972 4 628 8277  
Email: mail@hermionlabs.com, www.hermionlabs.com

## CERTIFICATE OF COMPLIANCE

Certificate Number: 20180622-E336892  
Report Reference: E336892-20180618  
Issue Date: 2018-JUNE-22

Issued to: FILT AIR LTD  
1 Avshalom Road,  
P.O. Box 166  
3095101 Zikhron Yaaqov, ISRAEL

This is to certify that representative samples of Power Supplies, Electrostatic Air-cleaning Equipment - Component  
Component – High Voltage Power Supply/Ionizing type module Sterionizer D6.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 867, Standard for Safety for Electrostatic Air Cleaners.  
CSA Standard C22.2 No. 187, Electrostatic Air Cleaners.

Additional Information: See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.

*Raiffeisenbank*

Brown Mahomed, Director, South American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at [www.ul.com/customer-service](http://www.ul.com/customer-service)

Page 1 of 1

## CERTIFICATE OF COMPLIANCE

Certificate Number: 20130521-E336892  
Report Reference: E336892-20100425  
Issue Date: 2013-MAY-21

Issued to: FILT AIR LTD  
DEREKH HAYEQEV, PO BOX 166  
30951 ZIKH-RON-YAAQOV ISRAEL

This is to certify that representative samples of COMPONENT - POWER SUPPLIES, ELECTROSTATIC AIR-CLEANING EQUIPMENT  
USR, CNR - Component - Power Supply, Electrostatic Air Cleaner, Ion Generator, Models IS1-12DX, IS1-12D3, and IS1-12D5, IS1-12DX-S1, IS1-12D3-S1, IS1-12D5-S1, IS1-12D5-S2 and IS1-12D5-S5.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 867 and C22.2 No. 187-09 - Electrostatic Air Cleaners  
Additional Information: See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada, and the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Recognized Component Mark on the product.

*William R. Conroy*

William R. Conroy, Director, South American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at [www.ul.com/customer-service](http://www.ul.com/customer-service)

Page 1 of 1





## The Standards Institution of Israel

This is to certify that:

Bipolar Ionizer

Trademark: STERIONIZER™

Models: IS1-12DX, IS1-12D3, IS1-12D5

Manufactured by: Filt-Air Ltd.

Address: 1 Avshalom Road, P.O.B. 166,  
Zikhron Yaakov 30951, Israel

has been tested by SII and found to comply with  
the standard requirements of:

EN 60335-2-65 "Household and similar electrical  
appliances – Safety – Part 2-65:  
Particular requirements for  
air-cleaning appliances", 2003

used in conjunction with

EN 60335-1 "Household and similar electrical  
appliances – Safety – Part 1:  
General Requirements", 2002,  
including Amendments A11: 2004,  
A1: 2004, A12: 2006, and A2: 2006

Test results are detailed in SII Test Report No.: 9012311173.

Certificate No.: 9012311173

Eng. Michael Terman

Acting Head of Electrical Safety Branch  
Electronics and Telematics Laboratory

Date of issue: 10/03/2010

42 Chaim Levanon st. Tel-Aviv 69977, Israel. Telematics Laboratory. Tel. 972-3-6467800 Fax. 972-3-6467779



Certificate of Analysis	
<b>Kitasato Research Center for Environmental Science</b>	
Bipolar Ionization System STERIONIZER™ from Filt-Air Ltd.	
<b>Analytical Testing Results for STERIONIZER™</b>	
Viral efficacy testing was conducted on STERIONIZER™ to assess its abilities to remove influenza virus H1N1 in the air.	
Testing consisted of aerosolizing the influenza virus in a test chamber, followed by exposure to the STERIONIZER™ at different time intervals.	
<b>Test Results</b>	
Operating time	Reduction in %
After 30 minutes exposure	92
After 60 minutes exposure	> 98.92
<b>Conclusion</b>	
The STERIONIZER™ demonstrated efficacy to reduce virus in the air.	
Toshio ITOH Ph. D. president	

Certificate of Analysis	
<b>EMSL Analytical, Ltd.</b>	
Bipolar Ionization System STERIONIZER™ from Filt-Air Ltd.	
<b>Analytical Testing Results for STERIONIZER™</b>	
Microbial efficacy testing was conducted on STERIONIZER™ to assess its abilities to disinfect (kill) bacteria, fungi and yeast in the air.	
Testing consisted of aerosolizing the selected microorganisms in a test chamber, followed by exposure to the STERIONIZER™ at different time intervals.	
<b>Test Results</b>	
After 120 minutes exposure	Reduction in %
<i>E. coli</i>	99.43%
<i>C. cladosporioides</i>	97.69%
<i>A. niger</i>	97.14%
<i>S. aureus</i>	81.67%
<i>C. albicans</i>	36.27%
<b>Conclusion</b>	
The STERIONIZER™ demonstrated both efficacy and ability to reduce bacteria and fungi in the air.	
Michael Terman, Ph.D. Head of Telematics Laboratory	

Certificate of Analysis	
<b>EMSL Analytical, Ltd.</b>	
Bipolar Ionization System STERIONIZER™ from Filt-Air Ltd.	
<b>Analytical Testing Results for STERIONIZER™</b>	
Microbial efficacy testing was conducted on STERIONIZER™ to assess its abilities to disinfect (kill) <i>Staphylococcus aureus</i> MRSA in the air.	
Testing consisted of aerosolizing the selected microorganisms in a test chamber, followed by exposure to the STERIONIZER™ at different time intervals.	
<b>Test Results</b>	
Exposure in time	Reduction in %
1 min.	76.30%
5 min.	74.22%
15 min.	48.53%
30 min.	90.75%
60 min.	90.47%
<b>Conclusion</b>	
The STERIONIZER™ demonstrated both efficacy and ability to reduce bacteria <i>Staphylococcus aureus</i> MRSA in the air.	
Michael Terman, Ph.D. Head of Telematics Laboratory	

Samruay Engineering  
48/5 Moo 9, Soi Nualthong  
Setthakij Rd. Suanluang  
Krathumban Samutsakorn 74100  
THAILAND

Center of Veterinary Research and Diagnosis  
Faculty of Veterinary Medicine  
Kasetsart University, Kamphaengsaen Campus  
1 Malaiman Rd. Kamphaengsaen  
Nakhonpathom, 73140, THAILAND

January 23th, 2012

Dear Sir/Madam

We are pleased to inform to you that we study the efficacy of "Samurai Ionizer" (WS1 and ISI-12D3) to inactivate highly pathogenic avian influenza H5N1. The residue of the virus (after directly applied "Samurai Ionizer" onto the virus containing allantoic fluid) is checked by virus isolation based on method of Office International des Epizootics (OIE), inoculation into allantoic sac of chicken embryonic eggs, hemagglutination test, and hemagglutination-inhibition test. It is found that "Samurai Ionizer" (WS1 and ISI-12D3) can inactivate the virus,  $10^{5.8}$  EID<sub>50</sub> in 1.0 ml of allantoic fluid completely within 10 minutes.

Regards,

(Assoc. Prof. Dr. Thaweesak Songserm) D.V.M., Ph.D.  
Head, Center of Veterinary Research and Diagnosis  
Faculty of Veterinary Medicine  
Kasetsart University, Kamphaengsaen Campus  
Nakhonpathom 73140, Thailand  
Tel: 66-34-351-901  
Fax: 66-34-351-405  
E-mail: fvetts@ku.ac.th



TURKISH REPUBLIC  
ISTANBUL UNIVERSITY  
ISTANBUL FACULTY OF MEDICINE  
Department of Microbiology and Clinical Microbiology

## TO WHOM IT MAY CONCERN

"VIRUSSAFE MEDICAL AIR PURIFIER" branded Filterless Plasma Ion Generator- Air Sterilization Equipment's effectiveness is tested by our Head Microbiological Department Laboratories by request of Equipment manufacturer Nero Industries LTD.

Test Startup Date: 22.11.2010

Test Termination Date: 20.01.2011

Test Location: Istanbul Faculty of Medicine, Department of Microbiology and Clinical Microbiology

Test Material : VIRUSSAFE MEDICAL brand, Filterless Plasma Ion Generator, Model- Air Sterilization Equipment

Test Equipments : 1 m<sup>3</sup> Volume Isolated Test Chamber with Solution Diffuser and Safe Reach Accessories.

Test Procedure : The test based on sterilization of the air contaminated with different bacterial strains. For this purpose, 1 m<sup>3</sup> volumetric isolated test chamber was performed. One Virussafe Medical Air Purifier Unit was placed on the floor of the chamber. Bioburden of environmental air with bacteria was measured before getting in action with VIRUSSAFE MEDICAL Equipment. The Petri dishes were opened and collected by the using sterile hand gloves. The test was conducted by opening Petri dishes containing bacterial media previously prepared on the floor of the chamber followed by pulverization of 100 ml of bacterial suspension containing  $10^5$  CFU bacteria/ml density for 5 minutes to chamber air. The following bacteria were used; *Staphylococcus aureus* ATCC 6538, *Pseudomonas aeruginosa* NCTC 6749, *Escherichia coli* ATCC 11229, *Bacillus subtilis* var. niger ATCC 9372. The equipment was started up and at the end of the tested times; 5, 15, 30, and 60 minutes, all Petri dishes were collected and incubated at 35 °C for 48 hours. The ratio of change in bacterial colony number (amount) CFU was recorded and calculated accordingly. The experiments were repeated 3 times and the mean number was shown in the table below.

Table 1: Bacteria Colony Count and Reduction Data

Bacterial culture in Petri dish	S.aureus ATCC 6538 Activation time (minutes)			P.aeruginosa NCTC 6749 Activation time (minutes)			E.coli ATCC 11229 Activation time (minutes)			B. subtilis var niger ATCC 9372 Activation time (minutes)		
	0	5	60	0	5	60	0	5	60	0	5	60
Colony Forming Unit (cfu) Quantity	1333	230	113	163	6	-	51	44	2	186	36	20
% Reduction	0	82.70	91.50	0	96.30	99.99	0	86.53	91.15	0	80.70	89.30

(-): No growth

As seen on the table, the equipment performed sterilization of the tested bacteria as %82.7 to %96.3 in five (5) minutes and % 91.5-% 99.99 sterilization in 60 minutes.

"VIRUSSAFE MEDICAL AIR PURIFIER" brand, Filterless Plasma Ion Generator- Air Sterilization Equipment's performance is recorded and approved on the air contaminated with pathogenic microorganisms, thus, playing an important role in reduction of epidemic infection risk and have prevention usage.

NOTE: These results are valid only for experimented sample and not to be used for advertising purposes.

Head of Department

Prof. Dr. Bülent GÜRLER

Effective date: July 28, 2016	Hy Laboratories Ltd. Park Tamar, Rehovot 76326 Tel: 972-8-9366475 Fax: 972-8-9366474 email: hylabs@hylabs.co.il	hylabs
Form: F11-050-02	Related SOP: 11-006 Molecular Biology Services	Test results report
		Replace form: F11-050-01

## Inactivation of Human Coronavirus OC43 (hCoV-OC43) by the Generon Company Gener Sterionizer Device

(A summarized report based on Hylabs test 82-49, order ID:363219, 26/11/2020)

### 1. Aim:

To test Gener Sterionizer devices, of two types, for their ability to inactivate human coronavirus OC43 (hCoV-OC43; an acceptable model for SARS-CoV2), by environmental sampling and monitoring of cytopathogenic effect (CPE).

### 2. Components of the Gener Sterionizer testing system:

The testing system described in this study report was set up based on counseling by the Israeli Ministry of Health (Based on customer declaration).



(A) sealed test chamber, (B) chamber door, (C) nebulizer, (D) two Gener Sterionizer devices (ISI-12D5-S1-D5, IG3-02SV-C33-D6), (E) ventilator, (F) Bobcat air sampler, (G) Bobcat input pipeline and adaptor

### 3. Methods and experimental procedures:

Ions spread by the Gener Sterionizer device [anions: 26,100 ions/cm<sup>3</sup>; cations: 18,808 ions/cm<sup>3</sup>] => virus/medium nebulization => Bobcat air sampling => Filter extraction => TCID50 assay => Virus log reduction calculations

### 4. Results and conclusion:

4.1. Gener Sterionizer cytotoxicity test: no cytotoxic effect to MRCS cells was observed.

4.2. Gener Sterionizer antiviral activity experiment:

Sample	Initial viral TCID <sub>50</sub> inoculation	Calculated viral TCID <sub>50</sub> /ml	Viral log reduction	% Virus reduction
PCI & II	2.31E+07	1.26E+06	0	0
TEST I		7.72E+03	2.2	≥99
TEST II		1.26E+04	2.0	≥99
TEST III		8.62E+03	2.2	≥99
Average viral log reduction			2.13	≥99

This report is submitted for the exclusive use of the person or corporation to whom it is addressed, and neither the report nor the name of these laboratories nor any members of its staff may be used in connection with the advertising, sale or any product or process, or any non-regulatory third party without the written permission of Hy-Laboratories Ltd. The results are approved for samples tested only. For research use only. Page 1 of 2

Effective date: July 28, 2016	Hy Laboratories Ltd. Park Tamar, Rehovot 76326 Tel: 972-8-9366475 Fax: 972-8-9366474 email: hylabs@hylabs.co.il	hylabs
Form: F11-050-02	Related SOP: 11-006 Molecular Biology Services	Test results report
		Replace form: F11-050-01

4.3. Results of the 3 biological repeats of this process show that the tested Gener Sterionizer devices indeed reduced ≥99% (2.13 log) the viral load capable of infecting the cells, compared to the load first introduced into the test chamber.

4.4. Under the tested conditions and utilizing the specific testing system, the Gener Sterionizer causes significant reduction of the viral infectivity (3-log reduction≥2; ISO 18184:2019). It is likely to cause a different effect under other test conditions and following adjustments or change of the tested system.

Performed by: Dr. Nehemya Friedman (Name & Sign) DATE: 01.03.2021

Reviewed by: Dr. Maya Amichay (Name & Sign) DATE: 01.03.2021

This report is submitted for the exclusive use of the person or corporation to whom it is addressed, and neither the report nor the name of these laboratories nor any members of its staff may be used in connection with the advertising, sale or any product or process, or any non-regulatory third party without the written permission of Hy-Laboratories Ltd. The results are approved for samples tested only. For research use only. Page 2 of 2

FILT AIR Ltd



**Filt-Air Ltd - Corona Virus Inactivation - Test Results**  
Filt-Air's Sterionizer™ achieved (99.9%) reduction in CoV viral load

**Overview**

Since the outbreak of the SARS-CoV-2 (Covid-19) pandemic, a unified global effort to prevent the spread of the virus has fueled the development of new technologies or the adaptation of existing technologies effective against the virus. Following the Influenza H1N1 (swine flu) and H5N1 (bird flu) epidemics, Filt-Air's proprietary Bi-Polar ionization technology was tested against these respiratory viruses with a proven 99% inactivation. A similar testing procedure was applied to evaluating the Sterionizer™'s effect on a CoV virus (similar in size and structure to SARS-CoV-2 used by industry to test SARS-CoV-2 applications). Test results indicated a 99.9% inactivation.

**Sterionizer™ Technology**

Sterionizer™ technology is based on cold plasma (bipolar ionization), a process which mimics a natural phenomenon where forces such as sun and wind generate ions which purify the outdoor air from microbes and pollutants. The Sterionizer™ uses electric currents to charge molecules of oxygen (O<sub>2</sub>) in the air resulting in two ions (O<sup>-</sup> and O<sup>+</sup>). These (O<sup>-</sup> and O<sup>+</sup>) ions bind with water (humidity) forming OH<sup>-</sup> and H<sub>2</sub>O<sub>2</sub> (hydrogen peroxide). These molecules attach to the proteins of the microbes (viruses, bacteria, fungus) rendering them inactive.

**Test Procedure and Results**

1. Location:  
The Chaim Sheba Medical Center, Tel Hashomer, Ramat Gan, Israel  
Industrial Biology Expertise & Solutions, Com., Jerusalem, Israel
2. Viral Media:  
Suspension: Corona Virus (GenBank accession no. AM260960)
3. Virus Detection:  
Real-time RT-PCR assay
4. Device:  
Sterionizer™ D5
5. Test Procedure:  
Sterionizer™ device was placed 30 cm from the CoV suspension. The ion flow was directed at the suspension for 10 minutes.
6. Test Results:

**Device**  
Sterionizer™

**CoV Reduction Ratio [%]**  
99.95

Mr. David Grau  
Filt Air Ltd – Plant Manager  
October 20, 2020



FILT AIR Ltd. - Member of the Beth-El Group  
P.O. Box 106 Zikhron Yaaqov, 3095101, Israel  
Tel: + 972-4-610 7777 • Fax: + 972-4-635 0396  
info@filt-air.com • www.filt-air.com

CONFIDENTIAL





## WARRANTY LIST

Distributor: Geocore s.r.o.  
Jugoslavských partyzanu 736/34  
160 00 Praha 6  
Czech Republic

email: e-shop@geocore.cz  
web: www.geocore.cz  
phone: +420 777 409 900

Product name:	Bion Fit Spot
Model:	BIONspot01
Color:	white
Date of sale:	

Thank you for choosing to purchase the BION ionizer. Our company is responsible for the quality of the product throughout the warranty period.

The warranty period begins on the day of sale and is extended to 5 years.

**GEOCORE**

**Geocore s.r.o.**

A: Jugoslávských partyzanů 736/34  
160 00 Praha 6, Česká republika

E: info@geocore.cz

W: www.geocore.cz

IČO: 28494393 DIČ: CZ28494393

Reg.: Městský soud v Praze oddíl 02,  
vložka 145694