

# **Instruction Manual**

## **Intelligent Mesh Nebulizer (Model No. NEB001)**

# Intelligent Mesh Nebulizer User manual

Version A/1

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## **Indications for Use:**

The Intelligent Mesh Nebulizer is designed for respiratory diseases treatment and respiratory-tract infection prevention.

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# ***Chapter 1 Before you start***

Thank you for purchasing NEB001 Intelligent Mesh Nebulizer (Hereinafter referred to the nebulizer or the device). Before using Intelligent Mesh Nebulizer for the first time, you need to read this Instruction Manual completely and pay particular attention to sections on device use procedures, device operation, and after-use procedures.

**SAVE THESE INSTRUCTIONS:** We recommend you re-familiarize yourself with this Instruction Manual before each use of Intelligent Mesh Nebulizer.

Intelligent Mesh Nebulizer is an electrical device. As such, it should be used with special attention to safety.

**READ ALL CONTRAINDICATIONS, WARNINGS AND SAFETY PRECAUTIONS BEFORE USE, AND STRICTLY FOLLOW THEM WHEN USING Intelligent Mesh Nebulizer!**

## **1. What is Intelligent Mesh Nebulizer?**

The nebulizer consists of two parts: physical device and APP software.

For physical device, It is designed for respiratory diseases treatment and respiratory tract infection prevention. It is intended to aerosolize physician-prescribed solutions for inhalation that are approved for use with a general-purpose nebulizer.

For APP software, it consists of interactive games and information display which could enhance entertainment and users' adherence to the nebulizer during treatment. It could be connected to the physical device by bluetooth.

If you don't want to use the APP, the physical device could also atomize normally. The atomizing function of device is dependent from the APP software.

### **Package contents**

Upon opening Intelligent Mesh Nebulizer package, you will find the following parts:

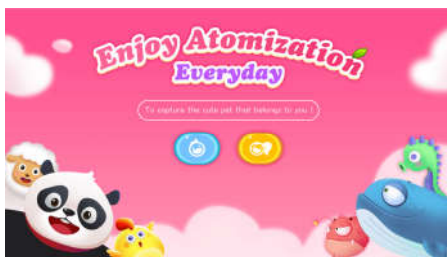
- Intelligent Mesh Nebulizer Main Unit ,Atomizing Cup ,Adapter and Accessories (Mouthpiece and

Masks).

- Instruction Manual
- Storage Bag

## 2. Intelligent Mesh Nebulizer description

Intelligent Mesh Nebulizer consists of the Main Unit, Atomizing Cup and Accessories .The Atomizing Cup is used to be filled with medicine liquid for atomizing. The Main Unit is used to provide electricity and the Accessories consists of Mouthpiece and Masks which are used to deliver the atomized medicine into your respiratory system.



Picture 1 Physical components and APP software

### 3. Getting to Know your Device

**Table 1 Components and functions**

Main Unit	Provide electricity.
Atomizing Cup	filled with medicine liquid
Mesh plate	Create low velocity aerosol
PUSH button	Disassemble the atomizing cup.
(ACTIVE/STAND-BY) button	Active/stand-by the nebulizer.
Indicator light	Green light on when the nebulizer works regularly; Flash blue light when the battery is running out electricity; Flash green light for 3s when there's no medicine liquid in the atomizing cup.
Charge indicator light	Orange light on when charging regularly; Green light on while finishing charging;
USB interface	Connect the adaptor.
APP software	Interactive games and information display.

### 4. Intelligent Mesh Nebulizer Indication for Use

The nebulizer is designed for respiratory diseases treatment and respiratory-tract infection prevention. It is widely used in curing diseases of respiratory system, such as cold, fever, bronchitis, asthma, pneumonia, pneumonic mycosis and pulmonary heart disease. It can also be used to cure occupational disease; give throat care to the artists, cure nose, throat diseases like chronic allergic rhinitis, acute laryngitis, etc.

The nebulizer shall be used with masks and mouthpieces. And the masks' and mouthpieces' connection tube diameter shall be  $20.0 \pm 0.1$  mm. And the masks can be connected to the nebulizer tightly.

### 5. Deciding to Use Device

The nebulizer is available to pediatric and adult patients, is intended to aerosolize

physician-prescribed solutions for inhalation that are approved for use with a general-purpose nebulizer.

The nebulizer can be used at clinics, hospitals and household environment, and it complies with requirement of IEC 60601-1-11 which is a international standard for household medical device .

So:

- 1) Do you/your children have any respiratory problems and be appropriated to use the Device?
- 2) Have you consulted your doctor?
- 3) Is device safe for you or your children to use?

Next, carefully review the Important Safety Information, Contraindications, Warnings, Precautions and Benefits sections found below, in order to decide if the device is safe for you or children to use.

If you have determined that this device is safe for you or your children to use and answered “yes” to questions above, then this device may be right for you!

If you decide the Risks outweigh the Benefits, or that you cannot comply with any of the Contraindications, Warnings, or Precautions, you should return your device within the first 30 days of purchase.

## ***Chapter 2 Important Safety Information***



Important Safety Information - Read Before Use!



CONTRAINDICATIONS (Who should never use)

CONTRAINDICATIONS:

- 1) The device can not be applied to anesthesia breathing system and respiratory system.
- 2) children must under adults supervision.
- 3) Pentamidine is not applicable to the device.

**You are unsure if the device is safe for you to use or not. Consult your doctor firstly.**



**Discontinue to use** if you encounter any discomfort. You may be allergic to accessories or another condition. Consult your doctor please.



**WARNING – No modification of this equipment is allowed**

**warning:** for type or dose of medicine please follow the instructions of your physician and/or licenced healthcare practitioner.

**warning:** to prevent cross infection, the device is used only by single patient.

**warning:** do not dry the device and its accessories with the microwave oven, oven drying, hair dryer, etc.

**warning:** do not make the nebulizer and its accessories contact corrosive liquids or gases.

**warning:** do not disassemble, repair or change the device.

**warning:** Direct plug-in plug is considered as disconnect device, please do not place the equipment in a difficultly operation position.

**warning:** Please be careful about strangulation due to cables and hoses, particularly due to excessive length. Keep this device out of the reach of children.



**WARNING- TO REDUCE THE RISK OF ELECTRIC SHOCK THAT MAY CAUSE SERIOUS INJURY OR DEATH:**

- **DO NOT** use or store the device in humid locations, such as a bathroom. use the device within the operating temperature and humidity.
- **DO NOT** operate the device or contact the Adapter socket or power switch with wet hands.
- **DO NOT** immerse the Main Unit in water or other liquid.

**Never open Intelligent Mesh Nebulizer!**

- **Do NOT Use** the Medicine with ester, fat or suspended particles, including herbal medicine, suggest use the standard nebulizing Medicine in accordance with the physician's advice.
- **Do NOT** Install the Main Unit around the power lines.

- **Do NOT** Operate the device near the heating device or open fire.
- **Do Not Use** the device before cleaning and disinfecting.
- **Do Not Use** mouthpiece and masks if its package is broken.
- **Do Not Use** the device if your hands are wet.

Use the device only for its intended use and as described in its manual.



**PRECAUTIONS-Take the following precautions to avoid minor or moderate injury and damage to your device:**

**Do Not Use** this device if your skin is sensitive to mouthpiece and masks. The mouthpiece and masks meet requirements of FDA .

**Do Not Allow** service or maintenance the equipment while used in patient.

**The patient is an intended operator and can perform the maintenance the equipment.**

**If any operator requests more information such as circuit diagrams, parts list and product descriptions, for repairs carried out by qualified technical personnel, please contact manufacturer.**

**If there is any emergency happened, move the device off you first and then shut it off and contact local dealer.**

**Do Not Use if any of the following conditions apply to you:**

- You have an active skin condition in the treatment area including, sores, psoriasis, eczema, sunburns, herpes simples, open wounds or a rash.
- You have any other conditions which in your doctor's opinion would make it unsafe for you to be treated.
- Keep this device out of reach of children.

**If you are not sure if the device is safe for you, please consult your doctor .**

## ***Chapter3    Safety Features of the Nebulizer***

### **1. With Intelligent Mesh Nebulizer Safety Comes First**

The Intelligent Mesh Nebulizer has several built-in safety features

- **Superior safety with lower voltage level**

To protect user, the rated voltage of the device is 5 v. The lithium battery is designed to be with protection mechanism which could avoid excessive charging or discharging, overheating and over-voltage. And the battery also meets the requirement of IEC 62133:2012 which is an international standard for battery.

- **Intelligent Mesh Nebulizer has an automatic shut-off feature**

while no medicine liquid is in Atomizing Cup at the beginning and ending of atomizing, the indicator light (Green Light) will shine for 3 seconds and then turn nebulizer off by itself. These could avoid overheating.

- **One-time- use Accessories**

These accessories(mouthpiece and masks) are one-time-use which could avoid cross infection.

- **With APP presenting the atomizing time and dosage .**

The APP can display the atomizing time and dosage in the process of atomizing so you can have much more info. on your treatment to prevent inhalation in excess.

### **2. Additional considerations of using Intelligent Mesh Nebulizer.**

This device is approved for human use only.

### **3. Protect your Intelligent Mesh Nebulizer**

- Please keep Main Unit and Atomizing Cup clean (see chapter 6), or may cause nebulizer can't work.
- Keep medicine liquid and mesh completely contacting.
- Do not rinse or immerse the Main Unit in any liquid.

## ***Chapter 4 Benefits and Risks of Using the Nebulizer***

The nebulizer provides the same basic function as an asthma inhaler, though many find it is easier to use and more relaxing. The nebulizer is easier to use for children, the elderly, the sick and those in the midst of an asthma attack as they do not require hand-breath coordination.

The nebulizer is considered much faster acting than taking oral medication, because it gets the medication into your lungs quickly. The nebulizer is incredibly efficient in getting the medication to you.

There is no evidence suggesting that nebulizers cause more side effects than other inhalation devices, such as metered dose inhalers (MDI) or dry powder inhalers (DPI). There are a few things to look out for when using a nebulizer, however. With a face mask, a good fit helps prevent leakage of the mist. A mouthpiece is sometimes preferred to stop skin or eye irritation from the circulating mist. Regular cleaning of the nebulizer parts is necessary, because medicine can accumulate in the cup and the growth of bacteria may cause infection.

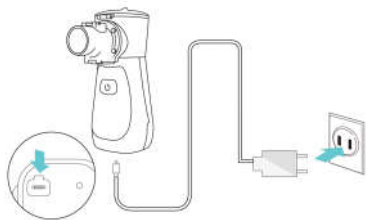
## ***Chapter 5 How To Use the Nebulizer***

The device is a personal medical equipment. In order to prevent cross infection, the nebulizer is for personal use only.

before first and after use, Please clean and disinfect the nebulizer. Keep the nebulizer dry after finish using it. See Chapter 6 for more details.

### **1. power supply**

- This nebulizer is powered with lithium batteries. The battery can be charged with Adapter.
- Adapter using



picture 2 charging

- 1) Connect the nebulizer to Adapter;
- 2) Connect Adapter to power.



**PRECAUTION:**

- 1) To ensure safe using, the Adapter meet the electrical safety standard IEC 60601-1;
- 2) Adapter technical parameter as below :

Model: HPU15-102

Input: 100-240Va.c. 47-63Hz 0.4-0.2A

Output: 5Vd.c. 2.4A Max.

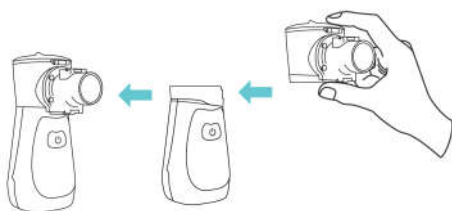
- 3) DO NOT USE THE NEBULIZER WHILE CHARGING. THE NEBULIZER CAN NOT OPERATE WHILE CHARGING. WE DO NOT TAKE RESPONSIBILITIES OF USING CHARGER OR ADAPTER INAPPROPRIATELY.

## 2. Assembly Nebulizer

- 1) Please clean and disinfect nebulizer before first using and after each using, then dry it, see chapter 6 for details)
- 2) Use One hand to hold the Main Unit, the another hand to hold the Atomizing Cup. Push the cup along the slot ,until you hear a “Click” sound. (Picture 2 )

**NOTE!**

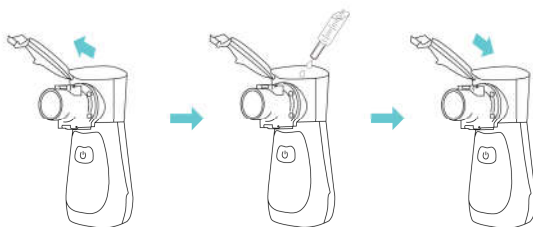
1) If the Atomizing Cup isn't assembled in the right place, the device may not be able to operate normally.



Picture2 Nebulizer Assembly

### 3. Add medicine liquid

- 1) One hand to hold the Main Unit, another to open Atomizing Cup buckle;
- 2) Add medical liquid into the Atomizing Cup and Please note: Max medicine liquid is 8 ml;
- 3) Tighten the Atomizing Cup cover.



Open the cover, add medicine liquid then close the cover, tighten the bottle

Picture 3 Add Liquid Medicine

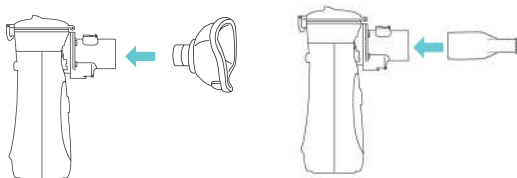
### NOTE!

- 1)After putting medicine liquid in, prevent nebulizer shaking or inverted which may cause the leakage of medicine liquid.
- 2)When the Charger is used, remove the power plug from the electrical outlet before using the device.

#### 4. Usage of Nebulizer

Nebulizer Accessories are categorized as mouthpiece, adult mask and child mask. Please choose appropriate accessories as your needs.

1) Connect mouthpiece or connect mask as Picture 4;

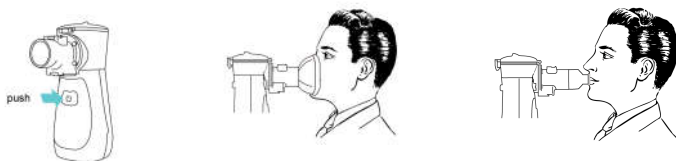


Picture 4 Mask Assembly and Mouthpiece Assembly

2) Enable Bluetooth on your cell phone, and launch the APP.



**NOTE!** You can download the APP from our official website.

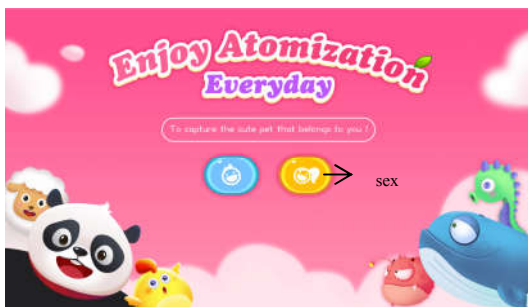
3) Push ACTIVE/STANDBY button, the indicator light (Green Light) will light up and the device starts to work. Put the mouthpiece flat end into the mouth, lips slightly closed or take mask slightly close to face, better to cover nose cavity and mouth together.



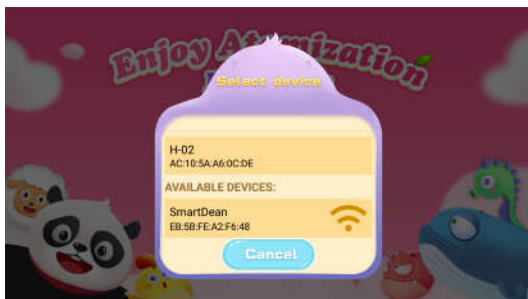
Picture 5 start to atomize

4) Select the avatar of the game characters by sex and automatically enter the game interface (picture 6). then select the available Nebulizer device in popup window (as shown in picture 7). After the selection,

then APP will enter into the interactive game as picture 8. When you inhale, the shell launcher will accumulate energy and when you exhale, the bomb will be fired up (picture 9 and 10). And the atomizing time will always be displayed during playing games. After atomizing time is expired, you can check the game scores as picture 11, if you want to start the game again, click  or  to refresh or continue to picture 8 to start the game again. Press the "back" button on your cell phone or turn off the "power" button on the nebulizer device, the game will be terminated and go to picture 12 which could display your scores and dosage, press the "back" button on your cell phone twice, you will exit the APP or press the "home" button back to re-start your atomizing game.



picture 6



picture 7





picture 8



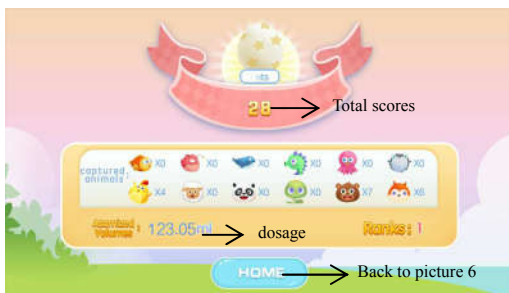
picture 9



picture 10



picture 11



picture 12

5) Keep calm, relax and sit well holding the nebulizer smoothly, take deep and slow breaths and have more effective ,amusing treatment.

**NOTE!**

- 1) Please use correctly mouthpiece, and don't spray the liquid to your tongue. Do not swallow the liquid and make sure liquid does not go directly to the affected area.
- 2) Improper gesture and unsmooth breathing may cause respiratory passage blockage.
- 3) Slightly tilt the Main Unit toward yourself to immerse the Vibrating Mesh in the Medicine.
- 4) When Low Voltage Indicator (Blue Light) continue to flashing slowly, it means the power running out,

please recharge as soon as possible.

5) The dosage of medicine can be used as the physician suggested.

6) If you would like to try the APP, we recommend that you could use the mouthpiece to enjoy games. If you are not interested in the APP, please ignore 2) and 4) in "4. Usage of Nebulizer". The atomizing function of device is independent of the APP software.

## 5. Turn Off The Power

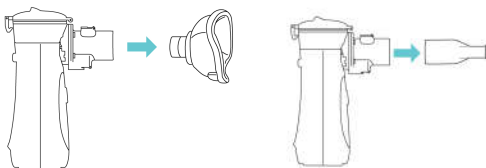
1) Press the ACTIVE/STAND-BY button to turn off the power, the Power Indicator (Green Light) will go out.

## 6. After Using

1) Remove the mouthpiece or mask

2) Hold the Main Unit by one hand, and Press the PUSH button behind the Main Unit shown in Picture 7 ;

Hold the Atomizing Cup by the other hand, remove the Atomizing Cup along the slot ;



Picture 12 disassembly the Atomizing Cup

3) Open the lid, pour all the residual liquid Atomizing Cup, and promptly clean and disinfect the device, allow the parts to air dry and store the device in a clean environment. See Chapters 6 for more information.



Picture 13 after using

## ***Chapter 6 Maintenance of the Nebulizer***

- After each use, first discard all residual medicine, and remove the attachment from the Main Unit to clean and disinfect. Dry the parts immediately after washing.
- Be sure to turn off the device.
- Do not store when Main Unit, Atomizing Cup have any remaining liquid or moisture.

### **1. Cleaning**

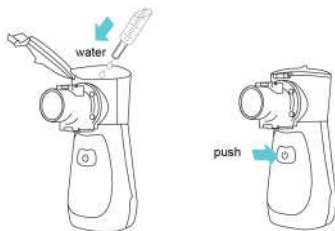
#### **1. Atomizing Cup**

1.1 Open the Atomizing Cup, and discard any residual medicine;

1.2 Pour a small amount of hot pure water ( Suggest temperature is 30-60°C) into the Atomizing Cup and close the Cap;

1.3 Press the ACTIVE/STANDBY button , Turn on the device to nebulizer the pure water for 3-5 minutes to remove residual Medicine from the mesh holes.

1.4 Rinse the Atomizing Cup with pure water. Gently wipe off excess water with gauze and allow the parts to air dry in a clean environment.



Picture 14 cleaning

## 2. Main Unit

2.1 Gently wipe the Main Unit with 75% medical alcohol and wipe off excess liquid with a soft clean cloth;

2.2 Clean the electrodes connecting the Main Unit and Atomizing Cup with 75% medical alcohol, in order to make the device work normally.

### CAUTION!

- 1) Do not wipe the Main Unit with other volatile liquid, such as Benzene or Thinner.
- 2) Do not rinse or immerse the Main Unit in any liquid.

## 2. Disinfecting

### 1. Atomizing Cup

1.1 After cleaning, disinfect the device using 75% medical alcohol as the way of cleaning. then pour excess alcohol and cleaning the cup again as described above. Dry it with medical gauze.

### NOTE!

- 1) Use medical gauze and medical cotton swabs to clean and disinfect.
- 2) Do not wipe with tissue paper or other cloth, otherwise the mesh will not nebulizer normally.

- 3) Do not wipe or touch the mesh with your hand or any other sharp object.
- 4) Do not use other household bleach to clean the device in addition to the above solution.

### **3. Cleaning and Disinfecting of Accessories**

Masks and mouthpiece are single use without cleaning and disinfection. Discard the mouthpiece and masks after using in order to ensure the safety of your usage.

Wipe the Adapter with gauze or swabs before using. It do not need disinfection.

### **4. Storage and transport**

1. Storage and transport Conditions:

- (1) Temperature:  $-25\text{ }^{\circ}\text{C} \sim 70\text{ }^{\circ}\text{C}$ ;
- (2) Relative Humidity:  $\leq 90\%$  R.H.
- (3) Air Pressure:  $70.0 \sim 106.0\text{ kPa}$ ;
- (4) Other requirements: No direct sunlight, Ventilation, No corrosive gas, No heating device, or Open fire.

2. Storage Instructions:

- (1) Keep the device out of the reach of unsupervised children.
- (2) Clean and disinfect the device after using .Assemble and store the device in the Storage bag or in a clean environment.
- (3) If the device has been storage at low or high temperature, The device need more than half an hour to warm from the minimum or maximum storage temperature between uses until it is ready for intended use.

**Validity:** The device is advised used in 3 years and in 3000 hours; For the battery, the device can be used for approximately 8 days after charging if operating for 30 minutes a day and the battery cycle life is 300 cycles. masks and mouthpiece are single use, do not use repeatedly.

### **5. Maintenance**

## 1. Working Conditions

- (1) Environment Temperature: 5 °C ~ 40 °C;
- (2) Relative Humidity: 15% ~ 90% R.H No condensation;
- (3) Air Pressure: 70.0 ~ 106.0 kPa;
- (4) Power: DC 3.7V lithium battery

## 2. Maintenance Instructions

- (1) Operate the device in normal work condition;
- (2) Don't make the nebulizer and its Accessories contact corrosive liquids or gases.
- (3) Refer to Chapter 7 for solution or contact the company or purchase dealer when the device can not work.
- (4) Please clean and disinfect the nebulizer as above in this Chapter.
- (5) Please charge the device if you haven't used for more than six months.

## 6. To protect the environment

The battery is not replaceable by yourself. Do not discard the device including its accessories(mouthpiece and masks) optionally, you must contact local authorities to determine the proper method of disposal because they may have potentially bio hazard.

# Chapter 7 Troubleshooting

There are something problem in using the device, please find solutions in the following table 2.

**Table 2 Troubleshooting**

PROBLEM	CAUTION	SLOUTION
Cannot turn on	1.The battery is very low 2. The equipment is damaged	1. Pls recharge in time 2.Pls contact the authorized service center or manufacturer.

No mist	<ol style="list-style-type: none"> <li>1. The handheld way is not right</li> <li>2. The drug is misfit</li> <li>3. The drug produces too much bubble</li> <li>4. The equipment is damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Correct the handheld</li> <li>2. The drug is too little or is unfit, for this equipment, pls consult a doctor to use the drugs</li> <li>3. Slightly shake the nebulizer until it appears the mist</li> <li>4. Pls contact the authorized service center or manufacturer.</li> </ol>
The device is on but nebulizer weakly	<ol style="list-style-type: none"> <li>1. Lithium battery is not electricity</li> <li>2. the mesh cap of Atomizing Cup is not clean</li> <li>3. The drug is misfit</li> <li>4. The sprayer module's diaphragm is damaged</li> <li>5. the electrodes of the Medicine is not clean</li> </ol>	<ol style="list-style-type: none"> <li>1. Pls recharge in time</li> <li>2. Clean the Atomizing Cup, if still not work properly, change a new one</li> <li>3. The drug is too little or is unfit for this equipment, pls consult a doctor to use the drugs</li> <li>4. Pls contact the authorized service center or manufacturer.</li> <li>5. Clean the electrodes and start</li> </ol>
Indicate light is blue	1. The lithium battery is not enough electricity	Pls recharge in time
What drugs suitable for atomization	Consult your doctor	Under the guidance of doctors advice and use of drugs
Why will have some liquid medicine residues in the equipment after each use	Because when equipment automatically shut down, you will immediately cease inhaled liquids	Normal phenomenon
Mouthpiece ponding	Because of temperature difference, it causes a little mist spray contact with the mouthpiece when spray, but due to the lower surface temperature, condensed into water droplets.	Remove the mouthpiece ponding, and pour out the ponding.
Whether everyone use their Accessories by themselves	It must avoid cross infection.	Everyone must use their Accessories by themselves.
The Medicine of Atomizing Cup is leaking	Atomizing Cup is broken or plastic aging	Replace of new Atomizing Cup before filling Medicine

\* If you have tried the above solutions, and the device still cannot normally nebulizer, suggest to contact your dealer.



## ***Chapter 8 Customer Service***

If your intelligent mesh nebulizer is broken/damaged, and need to repair or any other user assistance, please contact intelligent mesh nebulizer Customer Service:

Contact information:

Qingdao Future Medical Technology Co., Ltd.

Room 401 Building F , Changsheng Industrial Park, No.169 Zhuzhou Rd, Laoshan District, Qingdao City, Shandong Province, China.

Tel/Fax: +86-532-55677725

E-mail: [support@smartdean.com](mailto:support@smartdean.com)

### **1. Quality Assurance**

One year for free warranty for Main Unit. But accessories as consumed products do not belong to warranty range.

The details as following are not included in warranty range:

- The damage caused by human fall, touch, soaking, wet
- The damage caused by not in accordance with the correct operating instructions.
- Damaged by accident.
- Without our company's authority, users who disassemble and assemble by selves.
- Products Serial No. is tear or can't be recognized well, and no warranty card and No Original Invoice available.

**NOTE!** Take warranty card "Users Page" to contact local dealer or our company if your nebulizer needs to be repaired. Meanwhile please keep packing box in safe place so that it can be used when you send it to our company.

## ***Chapter 9 Product Specifications***

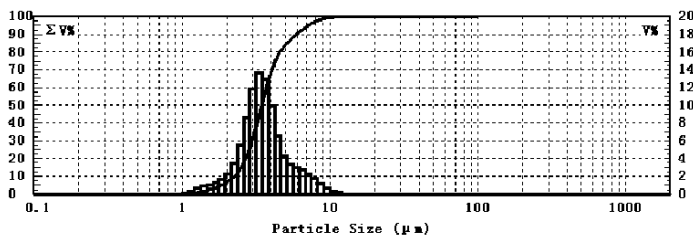
**Table3 Product Specifications**

Name	Intelligent Mesh Nebulizer
Model	NEB001
Applied part	Mouthpiece or mask
Dimensions	Approx. 50mm(L)×74mm(W)×111mm(H)
Weight	79±5g
Switching power supply	Model: HPU15-102. Input: 100-240Va.c. 47-63Hz 0.4-0.2A Output: 5Vd.c. 2.4A Max. It is considered as a part of equipment
Power Source	Input: 5Vd.c. 1.5A Min. ZN-103450 Lithium battery: 3.7Vd.c. 1800mAh
Safety Grade	BF, Internally powered equipment
Power Consumption	Approx.6W
Vibration Frequency	Approx.110KHz
Nebulization Rate	0.2ml/min minimum
Medicine Temperature	≤60℃
Working Voice	≤50dB
Particle Size	3.5μm±25%
Medicine Capacity	8ml maximum,0.5ml minimum
Battery Life	the battery can be used for approximately 8 days after charging if operating the device for 30 minutes a day and the battery cycle life is 300 cycles.
protected against the ingress of water and particulate matter	IP22
Guarantee Time	Main Unit 1 Year( Atomizing Cupnot included);
Operating Temperature	Environmental temp:5 ℃~40℃, Relative humidity : 15~90% RH, not in Coagulation situation Air Pressure: (70.0~106.0)kPa
Storage and transport Temperature	Environmental temperature: -25℃~70℃ Relative Humidity: ≤90%R.H. Air Pressure: (70.0~106.0)kPa
Accessory	Mouthpiece, Adult Mask, Child Mask, Adapter ,Instruction Manual

Fog particle equivalent volume (Picture 14)

**NOTE!**

- 1) It was tested by 0.9% physiological saline under the condition of temperature  $25\pm 3^{\circ}\text{C}$  ,humidity  $60\%\pm 5\%\text{R.H.}$
- 2) The horizontal line is particle diameter, the data are the logarithm distribution; Left vertical line is cumulative percentage of volume, corresponding to the curve upward trend; Right vertical line is a range of volume percentage, corresponding to Graph histogram or rolling.



Picture 14 Fog Particle Equivalent Volume

## ***Chapter 10 Electromagnetic Compatibility***

- Do not use the device in the direct vicinity of short-wave or microwave equipment.
- Do not connect this equipment to other equipment, Consult your physician for users wearing the heart pacemaker.

### **1、Electromagnetic Compatibility**

The Intelligent Mesh Nebulizer has been tested and found to comply with the limits for medical devices in IEC 60601-1-2. These limits are designed to provide reasonable protection against harmful

interference in a typical medical installation.

If other devices cause harmful interference to this device, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate this device.
- Increase the separation between the interference equipment.
- Connect the equipment into an outlet on a circuit different from that to which the other device(s) are connected.
- Consult the manufacturer for help.

**Table 4 Guidance and manufacturer's declaration-electromagnetic emissions**

Item	Applied standard	Result
Emission Measurement		
Radiated emission	IEC 60601-1-2:2007 CISPR 11:2010	PASS
Conducted disturbance	IEC 60601-1-2:2007 CISPR 11:2010	Not applicable
Harmonic current emission (harmonic)	IEC 60601-1-2:2007 IEC 61000-3-2:2014	Not applicable
Voltage fluctuations & Flicker (Flicker)	IEC 60601-1-2:2007 IEC 61000-3-3:2013	Not applicable
Immunity Measurement		
Electrostatic discharge	IEC 60601-1-2:2007 IEC 61000-4-2:2008	PASS
RF field strength susceptibility	IEC 60601-1-2:2007 IEC 61000-4-3:2010	PASS
Electrical fast transients/burst test	IEC 60601-1-2:2007 IEC 61000-4-4:2012	Not applicable
Surges test	IEC 60601-1-2:2007 IEC 61000-4-5:2014	Not applicable
Conducted susceptibility test	IEC 60601-1-2:2007 IEC 61000-4-6:2013	Not applicable
Power-frequency magnetic field susceptibility test	IEC 60601-1-2:2007 IEC 61000-4-8:2009	PASS
Voltage dips and interruptions test	IEC 60601-1-2:2007 IEC 61000-4-11:2004	Not applicable

## **2、 Notes on FCC certification**

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced for help.

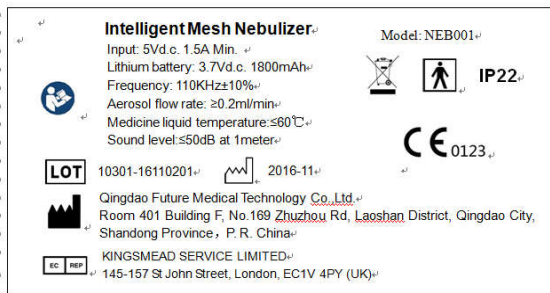
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

# ***Chapter 11 Labeling, Marks and Symbols***

## **1、 Labeling**



## 2、Marks and Symbols

	CE mark		Lot number
	Separate collection		Date of manufacture
	See the Instruction		Manufacturer
	BF type application part		European union representative
	Notice		Power Indicator
	Low Liquid Indicator		Low Voltage Indicator
IP22	Waterproofing Grade		Environment-friendly Use Period