

**PORODO**  
LiveOn



**Porodo LiveOn**

**Portable Nebulizer**

SKU: PDNBM11WH

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## Product Overview

The Porodo Portable Nebulizer is a portable and rechargeable device designed to provide respiratory relief for individuals of all ages. This nebulizer helps deliver medication directly to the lungs for quick relief from conditions such as asthma, allergies, chronic obstructive pulmonary disease, bronchitis, cystic fibrosis, and pneumonia. It includes both adult and child masks, ensuring it is suitable for the entire family. The nebulizer features self-cleaning technology for ease of use and maintenance, along with two airflow control settings for added comfort. Its microporous design ensures efficient delivery of medication, while it is safe for latex-sensitive users and made from medical-grade materials for durability and reliability. The device operates without residual liquid, ensuring full medication delivery, and its fine mist helps in effective breathing treatments.

## Specifications

Material	ABS + PC
Battery Capacity	300mAh
Battery Type	Built-in Lithium Battery
Rated Voltage	100-240V
Rated Frequency	50/60Hz
Rated Current	0.5A Max
Output	5V/1A

Nebulization Rate	0.2mL/min
Ultra Oscillation Frequency	110KHz±10KHz
Medicine Liquid Capacity	8mL (Max), 1mL (Min)
Particle Size (MMAD)	Adult: $2.5 \pm 0.5 \mu\text{m}$ , Pediatric $3.8 \pm 0.5 \mu\text{m}$
Working Time	20 Minutes
Charging Time	1 Hour
Noise Level	50dBA Max
Operation Temperature	10°C to 40°C
Charging Interface	USB-C
Water Resistance Level	IP22
Product Weight	45g
Product Size	47 x 56 x 76mm
Model Number	PDNBM11

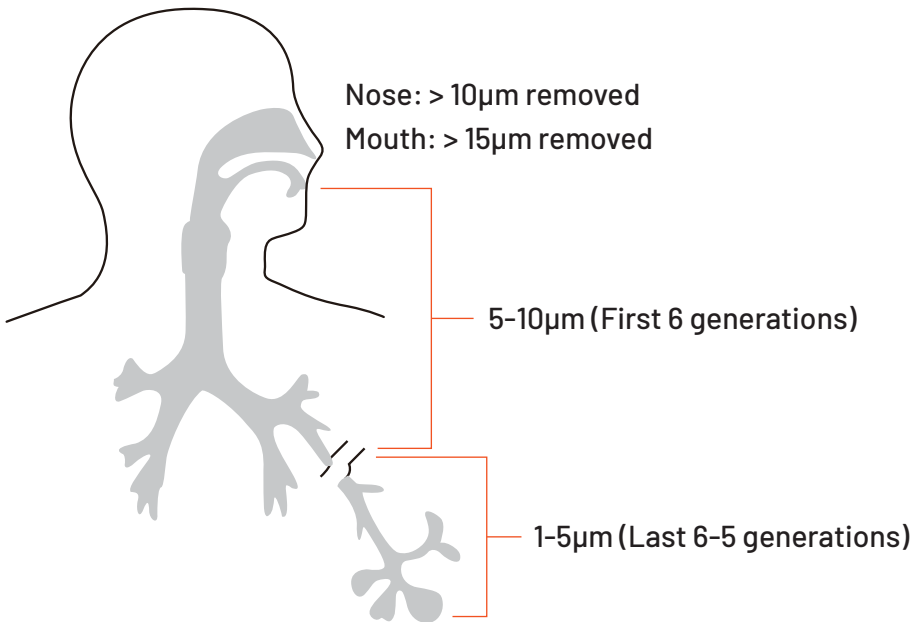
## Product Features

1. Micropore design, fine atomized particles, and more effective drug absorption.
2. Low noise design of piezoelectric components, with a measured volume of  $\leq 50\text{dB(A)}$ .

3. Minimal atomization residue, with the amount of residue  $\leq 0.5\text{ml}$ , making it more economical.
4. Compact design with one-button operation, making it easy to use.
5. Independent medication cup component design, easy to clean, and the medication cup is washable.

## Operation Guide

When the nebulizer outputs high-frequency electrical energy, the transducer located beside the medication cup generates ultrasonic energy, which drives the mesh located in the center to vibrate at the same ultrasonic frequency. The liquid medicine is vibrated and squeezed through the micropores of the mesh, turning it into an aerosolized medication. These tiny medicine particulates are ejected through a mouthpiece or mask and inhaled into the respiratory tract to achieve the desired treatment.



According to medical research, particle size, along with particle velocity and settling time, plays an important role in how the medication is deposited into the lungs. As the particle size increases up to 3  $\mu\text{m}$ , aerosol deposition shifts from the periphery of the lung to the conducting airways. Oropharyngeal deposition increases as particle size increases up to 6  $\mu\text{m}$ . With very small particles of 1  $\mu\text{m}$  or less, a high number of particulates are lost during exhalation. Consequently, particle sizes of 1-5  $\mu\text{m}$  are best for reaching the lung periphery, whereas particles of 5-10  $\mu\text{m}$  deposit mostly in the conducting airways, and particles of 10-100  $\mu\text{m}$  deposit mostly in the nose and/or mouth. The primary advantage of inhaled aerosol therapy is treating the lungs directly with smaller doses, resulting in fewer side effects than with oral delivery. (This information was provided by: A GUIDE TO AEROSOL DELIVERY DEVICES FOR RESPIRATORY THERAPISTS – 4th Edition).

## Medications that can be used with the device

1. Albuterol sulfate
2. Ipratropium bromide
3. Cromolyn sodium

## Intended use

The portable ebulizer is an ultrasonic nebulizer system designed to aerosolize liquid medications for inhalation by the patient. The device may be used with pediatric patients (5 years and older), as defined by the prescribed medication, and adult patients in hospital/institutional settings, homes, schools, and long-term care facilities.

It is not intended for use with Pentamidine.

## Package Contents

Part Name	Use Limitation
Portable Nebulizer (including medication cup)	Single Patient use and reusable
Adult Mask	Single patient use
Kid Mask	Single patient use
Mouthpiece	Single patient use
USB Cable	/

## Safe Operation Instructions

### a. Contraindications

1. Patients with severe hypoxia or respiratory failure are prohibited from using the device.
2. Do not operate the device in the presence of flammable gases or high concentrations of oxygen.

### b. Before Use

1. The device cannot be used for life support or life maintenance.
2. The device should only be used on conscious patients.
3. Please operate and store the device according to the specified operation and storage guidelines.
4. Do not use the device if it is damaged or immersed in water.
5. Do not disassemble or modify the device without authorization from the manufacturer.

**6.** Please use the accessories (such as the medication cup, adult mask, kid mask, and mouthpiece) supplied by the manufacturer. These accessories meet the biocompatibility requirements of ISO 1-10993.

**7.** Do not use the device near other high-frequency devices, such as microwave ovens.

**8.** The mouthpiece, adult mask, and kid mask are disposable. To avoid bacterial infections and/or other pathogen infections, please do not reuse these accessories.

**9.** Do not share your mouthpiece or mask with others. Shared use of these accessories may increase the risk of infection.

### **c.** During Use

**1.** The device is intended to be operated by a healthcare professional, such as doctors, nurses, and therapists. It may also be operated by the patient's parent or an adult patient who has been trained by a healthcare professional.

**2.** Children or disabled patients must use the device with the help of a healthcare professional, adult, or guardian who has been trained by a healthcare professional.

**3.** Do not shake the main unit violently or open the lid of the medication cup during atomization to avoid overflow of the medication.

**4.** Do not direct the aerosol toward your eyes when atomizing.

**5.** If you experience any discomfort during nebulization, stop using the device immediately and consult your physician for further advice.

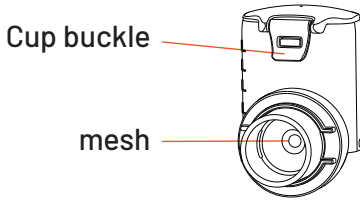
### **d.** After Use

**1.** Please clean all parts as instructed in the user's manual.

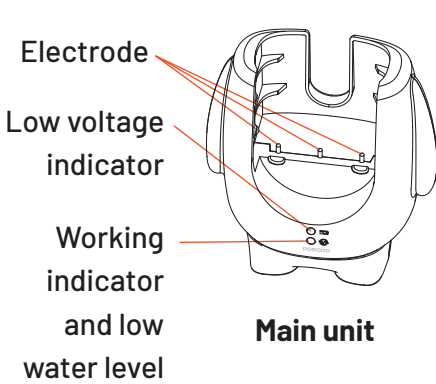
**2.** Do not immerse the main unit in water when cleaning to avoid damaging any electrical parts.

**3.** Please keep the device out of the reach of children. The potential to swallow small parts is dangerous.

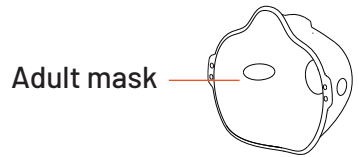
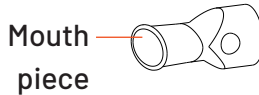
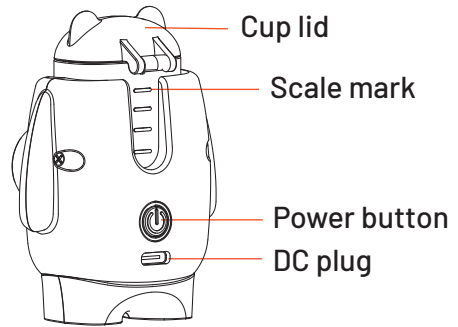
# Product Components



**Medication cup**



**Main unit**



# Light Indicators

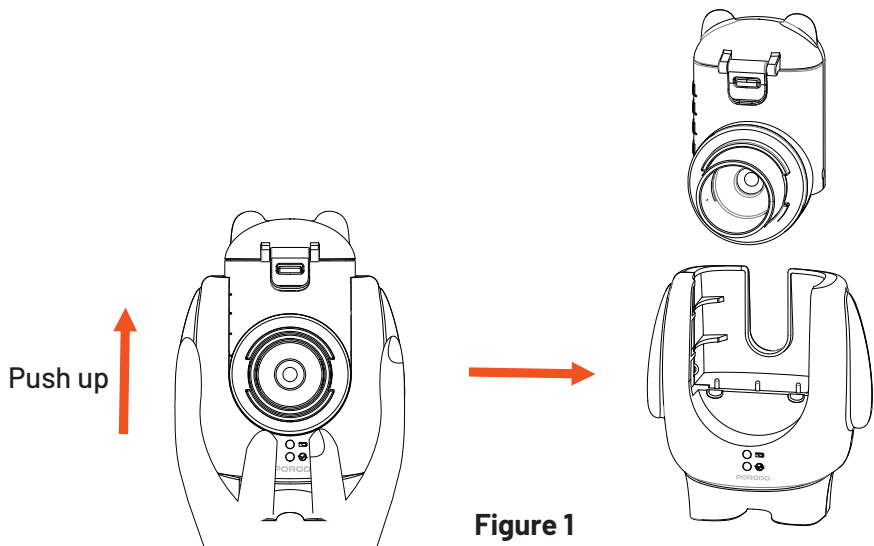
The Green light stays on (while working)	Working in normal spray mode
The green light on and off slowly (While working)	Cleaning spray mode is working

The green lights flash slowly	Low battery reminder
The green lights flash quickly	Insufficient power, unable to work, shut down
Blue light flashing	No liquid medicine, shut down
The orange light is on (when charging)	Charging
The orange light stays on (when charging)	Charging complete

**NOTE:** Make sure that the medication cup and the main unit are clean before use.

## Adding Liquid Medicine

a. As shown in figure 1, fix the main machine by hand, and push out the medication cup vertically upward along the slide way of the main machine.

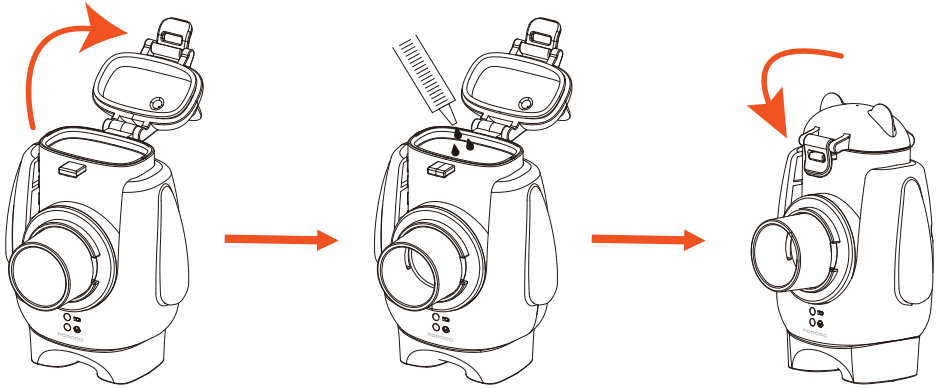


**Figure 1**

**b.** Open the medication cup cover and pour the medicine into the medication cup as shown in figure 2. To close the lid, press the buckle to ensure the lid is secured tightly.

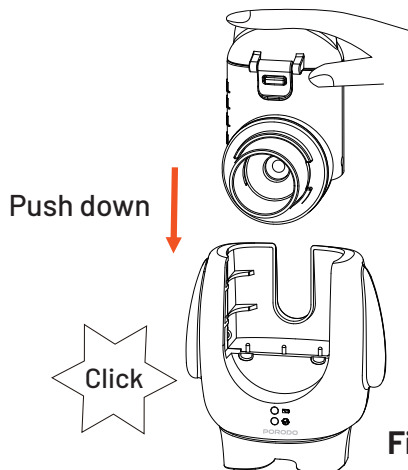
The suggested minimum liquid medicine should be 1ml, and do not exceed the highest scale line of the medication cup.

Fasten the medication cup lid to prevent the liquid from leaking out.



**Figure 2**

**c.** As shown in figure 3, hold the medication cup by hand, and install the medication cup vertically downward along the slide way of the main engine. When you hear a click, the installation is complete.

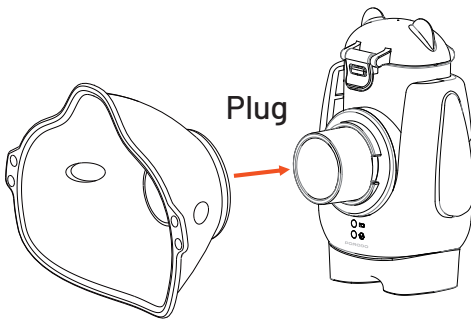


**Figure 3**

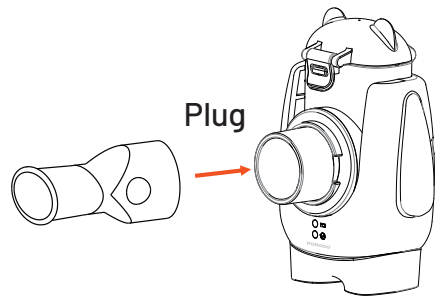
**Note:** Please keep the electrode on the main unit and the medication cup clean from dirt and residue, and confirm that the medication cup was installed in place. Otherwise, abnormal electrode conduction may be caused, and the atomizer cannot spray normally.

## Installing the Mask or the Mouthpiece

Install the mouthpiece or a mask onto the nebulizer as indicated in figure 4 or figure 5.



**Figure 4**



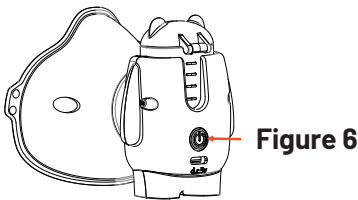
**Figure 5**

The mouthpiece, the adult mask, and the kids mask provided are disposable parts. Please use the inhalation device according to your doctor's instructions. Check if it is clean, hygienic and dry before first time use.

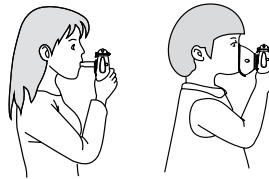
## Operating the Nebulizer

- a.** Press the power button once to start the device, with the working indicator (green) lighting up, as shown in Fig. 6.
- b.** If there is no liquid medication or if the liquid inside the medication cup is very poorly conductive (e.g., distilled water), the low water level indicator (blue color) will flash, and the device will automatically turn off.

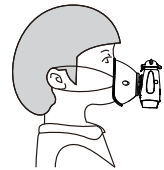
- c.** After the power is turned on, the nebulizer will undergo a short start-up period (within about 2 seconds) and then begin spraying normally.
- d.** During the spraying process, there may be noise caused by high-frequency vibration. Please shake the nebulizer gently to reduce the probability of sound.
- e.** Place the mask over your mouth and nose or place the mouthpiece into your mouth, as shown in Fig. 7. Hold the nebulizer smoothly, relax, and start breathing.
- f.** According to personal needs, as shown in Figure 8, the rope can be tied to the mask, allowing the nebulizer to be atomized without holding it by hand.
- g.** Since the characteristics of liquid medicine vary, if the nebulizer does not automatically shut down after the medication is exhausted, please press the power button to turn off the device immediately to avoid damage to the mesh.
- h.** When the liquid is about to run out, it is recommended to tilt the front side of the nebulizer (on the side of the spray direction) slightly toward the patient. This helps the remaining liquid contact the atomized piece for nebulization.
- j.** Do not cover the vents on the mask and mouthpiece with your hands or other objects during the atomization process.
- k.** During the atomization process of certain types of liquid medicine, a large amount of foam may be concentrated in the vicinity of the mesh in the medication cup, as shown in Fig. 13. This may interrupt the spray. In this case, turn off the nebulizer immediately, shake the nebulizer slightly, and then restart.



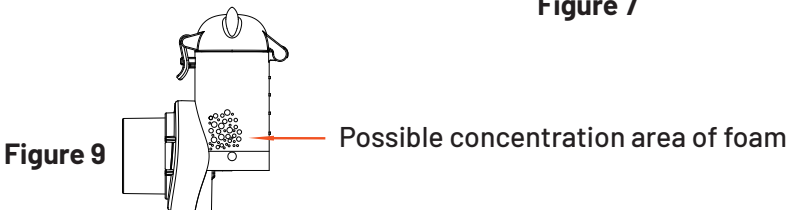
**Figure 6**



**Figure 7**



**Figure 8**



**Figure 9**

Possible concentration area of foam

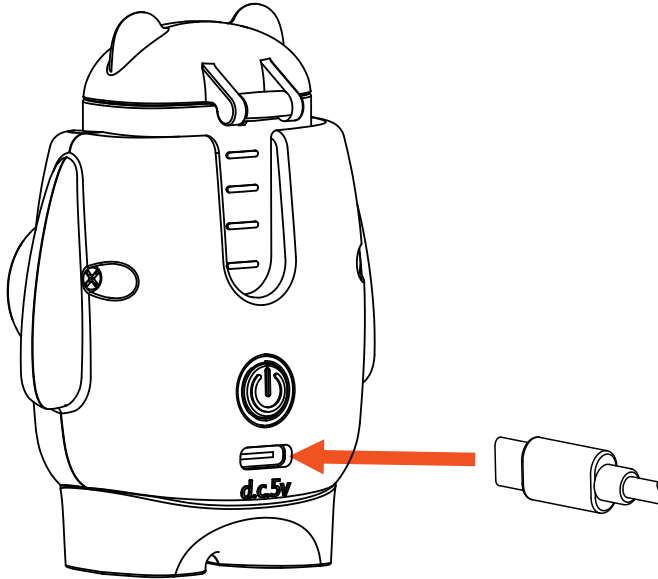
## Cleaning Mode

In the shutdown state, add 3–6ml of clean water into the medication cup. If the user keeps pressing the power button for 3 seconds, the "cleaning mode" will be activated. The working indicator light (green) will blink slowly on and off, and the device will operate for 3 minutes before automatically shutting down.

## Charging Instructions

- 1.** Model NBM-11 with a built-in lithium battery. For first-time use or if the device has not been used for a long time, we suggest connecting the power supply to charge in order to activate the battery.
- 2.** Open the USB socket protection cover on the back of the main unit. Connect the Type-C interface to the main unit and the power adapter as shown in Figure 10. Then, plug the power adapter into the power socket. The working indicator (orange light) flashing indicates that charging has started. When the working indicator (orange light) stops flashing, charging is complete.
- 3.** After charging is complete, unplug the adapter and the Type-C cable, and close the USB socket protection cover.
- 4.** Please contact your local waste disposal facility to understand the requirements for proper disposal of waste batteries.
- 5.** When the low voltage indicator (green light) flashes, the battery is about to run out. Please charge the nebulizer soon.
- 6.** After charging, please remove the power plug and avoid connecting the power supply for extended periods.
- 7.** If the device has not been used within three months, it is recommended to charge the lithium battery once.
- 8.** Be sure to use a power adapter that complies with IEC 1-60601 standards and has an output of DC 5V/1A.
- 9.** Please pay attention to this device during charging, and do not connect the power supply for extended periods.

**Warning:** This product contains a Lithium ion battery, and it is prohibited to be put into fire or immersed in liquids.



**Figure 10**

## **Power Off**

- 1.** The product automatically turns off after operating continuously for 20 minutes.
- 2.** After the liquid medicine is exhausted, the nebulizer may emit a high frequency sound, and the low water level indicator (blue) will flash and the nebulizer will shut down immediately.
- 3.** During use, if you need to stop using the nebulizer, you can press the power button to turn off the device and the working indicator (green) goes off.
- 4.** When using an external power adapter, pull out the power cord after turning off the power.

## Battery Related Parameters

Battery Life	1 Hour of working time when fully charged
Charging time	About 1 hour
Full Battery Indication	Green Light
Low Battery Indication	Low voltage indicator flashes slowly
Auto shut-off battery indication	Shuts down after the low voltage indicator flashes slowly

## Cleaning Guide

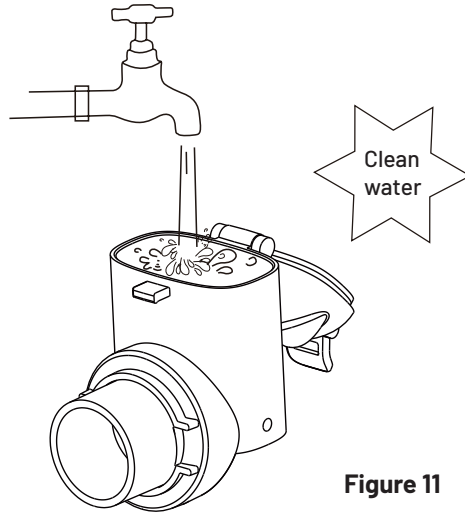
The adult mask, kid mask, and the mouth piece are for a single use and disposable accessories. The medication cup, mesh and nebulizer main unit should be cleaned as directed after each use.

**Note:** Make sure all parts of the device are completely dry before storage.

### a. Cleaning the Medication Cup

1. After atomization is complete, pour out any residual liquid medication from the medication cup.
2. Refer to Section 5.3, Point C, to complete the cleaning mode.
3. Press the Exit button to disassemble the medication cup from the main unit, as shown in Fig. 1.
4. Place the medication cup in 1% v/v soapy water (i.e., 1 part Palmolive dishwashing detergent to 99 parts water) for at least 1 minute.
5. Rinse under running water for at least 3 minutes, as shown in Fig. 11.

6. Visually inspect the medication cup under bright light. The medication cup should be cleaned thoroughly, with no residue or smell.
7. If the medication cup is not visually clean, repeat steps 3 to 5.
8. Discard any excess water and leave the medication cup in a clean place for at least one hour until it is dry.



**Figure 11**

#### **b. Cleaning the Outer Shell of the Main Unit**

1. Wipe the enclosure (including buttons) 3 more times with a damp cloth which has dipped with 1% soapy water.
2. Wipe the enclosure (including buttons) with a damp cloth which was dipped with clean water.
3. Visually inspect the surface of the main unit. The outer shell of the main unit should be cleaned thoroughly, with no residue or stickiness.
4. If the device is determined to be visually unclean, repeat steps 1 to 3.
5. Put the device in a clean place and dry it thoroughly.
6. Push the clean medication cup onto the main unit as shown in Fig. 3.

**Note:** The damp cloth should be wrung out to remove any excess water, preventing water from entering the main unit and damaging the device during cleaning.

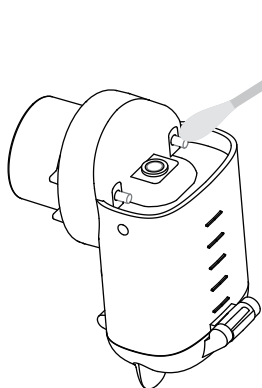


Figure 12

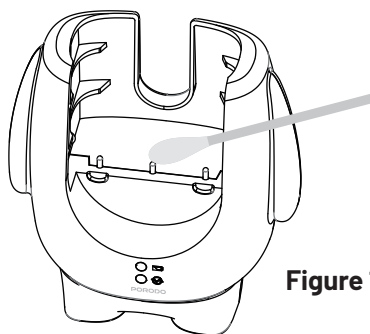


Figure 13

**Notes:**

- 1.** When multiple or different medications are used for atomization, please ensure that the medication cup is cleaned to avoid any potential adverse reactions that may be caused by residual liquid between different medications.
- 2.** If the device is not cleaned correctly and after each treatment as indicated, microorganisms may remain in the unit, causing a risk of infection.
- 3.** Keep the battery compartment dry at all times.
- 4.** Do not touch the mesh with your fingers or other sharp objects, as this could damage the mesh, preventing it from working properly.
- 5.** Do not clean any parts in a dishwasher.
- 6.** Do not use the microwave to dry any parts.












## Troubleshooting










<b>Problem</b>	<b>Possible Causes</b>	<b>Solutions</b>
Unable to boot (The working indicator light is not on, the nebulizer does not work)	Low Battery power	If it is a Li-ion battery type, please charge it first, and then restart.
	The power adapter and nebulizer did not properly connect	Reconnect and restart
No mist comes out (The working indicator is on, but the nebulizer does not work)	The main unit or the electrodes on the medication cup are dirty, resulting in poor contact.	The main unit or the electrodes on the medication cup are dirty, resulting in poor contact.
	There is dirt, serious blockage or damage on the mesh.	There is dirt, serious blockage or damage on the mesh.
	Medication cup is not assembled correctly.	Medication cup is not assembled correctly.
	The liquid medicine is not in contact with the mesh sufficiently.	The liquid medicine is not in contact with the mesh sufficiently.

The spray volume is too small.	There is dirt, serious blockage or damage on the mesh	Clean the medication cup according to the manual. If the problem is not fixed after cleaning, please replace the medication cup.
	Low voltage indicator (green) flashes, battery power is low.	If the battery is a Li-ion type, please charge it first and then restart.
	The medication cup was filled with a very weakly conductive liquid (such as distilled water) or types of drugs that are not suitable for atomization.	Refill the appropriate type of liquid medicine (please consult a doctor for the type of used medicine)
The liquid medicine is used, but the nebulizer does not automatically shut down.	Some liquid medicines have different characteristics and strong conductivity.	Manually shut down the device immediately.
	Some liquid medicines may produce some foam in the medication cup.	It is a normal phenomenon. manually shut down the device and clean up the residual liquid.
Liquid medicine leakage	The liquid medicine added exceeds the maximum allowable capacity of the medication cup.	Pour out the excess liquid medicine and restart.
	The medication cup shakes violently during use.	When in use, hold the nebulizer steadily.

	The medication cup is damaged or the sealing silicone rubber ring is aged.	Replace with new medication cup.
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## Symbol Description

	Caution
	Type BF applied part
	Manufacturer information
	Batch code
	Medical device
<b>IP22</b>	IP code of the device: this device's grade of ingress of solid foreign objects is more than 12.5mm diameter. and the grade of water proof is dripping (15 tilted).
	Authorized representative in the European Community
	Serial Number
	Follow the operating instructions
	Disposal in accordance with Directive 2012/19/EC (WEEE)
<b>RoHS</b>	Complies with RoHS directive 65/2011/EU of the European parliament and of the council of 8 June 2011

	Fragile: handle with care
	Keep dry
	This way up
	Do not re-use
	Manufacturing date
	This device has not been tested for use in an MR environment and should not be used in or exposed to MR environments while patients are wearing the device. Keep it outside the MRI scanner room.
	Unique Device Identifier
	Stacking layer
	Caution: Federal law restricts this device to sale by or on the order of a physician.

## Disclaimer

The following conditions are not covered by the warranty:

1. Vulnerable and consumable parts: medication cup, masks, mouthpiece, batteries, etc.
2. Product failure caused by unauthorized disassembly or repair.
3. Product failure caused by careless dropping during use and handling.

4. Liquids such as water or medication that enter the mainframe, preventing normal operation.
5. Changes, deletions, or damage to the serial number or batch number of the device.

## EMC Warning

1. The portable (ultrasonic) nebulizer is intended for use in the hospital and family settings, except near active HF surgical equipment and the RF shielded room of an ME system for magnetic resonance imaging, where the intensity of EM disturbances is high.
2. Do not use a mobile phone or other devices that emit electromagnetic fields near the unit. This may result in incorrect operation of the unit.
3. This unit has been thoroughly tested and inspected to ensure proper performance and operation.
4. Avoid using this equipment adjacent to or stacked with other equipment as this could result in improper operation. If such use is necessary, ensure this device and other equipment are observed to verify normal operation.
5. Use of accessories other than those specified or provided by the manufacturer may result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment, leading to improper operation.
6. cellular 5G and some security systems (e.g., electromagnetic anti-theft systems (EAS) and metal detectors, such as those used in electronic article surveillance at entrances or exits of department stores, libraries, homes, or other public places or transport environments) and airport security screening devices may affect the nebulizer. Please avoid using the nebulizer near these places. Additionally, RFID devices, which are often used to read identification badges, as well as some tag deactivation devices, such as those used at payment counters in stores or loan desks at libraries, may also affect the nebulizer. If you need to go through one of these devices, turn off your

nebulizer. Before each usage, check the status of your nebulizer to ensure it operates normally.

7. Using short-wave diathermy, microwave diathermy, or therapeutic ultrasound diathermy (all referred to as diathermy) and electrotherapy devices near this nebulizer may cause malfunction or loss of essential performance. Please avoid using the nebulizer near such equipment. Before each usage, ensure the nebulizer is functioning normally.

## **Essential Performance of the Portable Nebulizer**

Nebulization rate	>0.2mL/min
Ultrasonic Oscillation Frequency	110 KHz ± 10KHz

<b>Guidance and Manufacturer’s Declaration - Electromagnetic Emissions</b>		
<b>The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.</b>		
<b>Emissions test</b>	<b>Compliance</b>	<b>Electromagnetic environment - guidance</b>
RF emissions CISPR11	Group 1	The device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR11	Class B	The device is suitable for use in all establishments including those directly connected to the public low-voltage power supply network that supplies power to buildings used for domestic purposes
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations and flicker emissions IEC 61000-3-3	Complies	

## Guidance and Manufacturer's Declaration — Electromagnetic Immunity

The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.


Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment-guidance
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Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8kV contact ±2kV, ±4kV, ±8kV, ±15kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2kV for power supply lines ±1kV for input/output lines	±2kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1kV differential mode ±2kV common mode	±1kV differential mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT; 0,5 cycle g) At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT; 1 cycle and 70% UT; 25/30 cycles Single phase: at 0° 0% UT; 250/300 cycle	0% UT; 0,5 cycle g) At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT; 1 cycle and 70% UT; 25/30 cycles Single phase: at 0° 0% UT; 250/300 cycle	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.
Power frequency (50Hz/60Hz) magnetic field IEC 61000-4-8	30A/m	30A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE UT is the a.c. mains voltage prior to application of the test level.

## Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF	3 Vrms 150 kHz to 80 MHz	3V 150 kHz to 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.  <b>Recommended separation distance</b> $d = \left[ \frac{3.5}{V_1} \right] \sqrt{P}$ $d = \left[ \frac{12}{V_2} \right] \sqrt{P}$
IEC 61000-4-6	6 V in ISM and amateur radio bands between 0,15 MHz and 80 MHz	6 V in ISM and amateur radio bands between 0,15 MHz and 80 MHz	
Radiated RF	10 V/m 80 MHz to 2.7 GHz	10 V/m 80 MHz to 2.7 GHz	
IEC 61000-4-3	385MHz-5785 MHz Test specifications for ENCLOSURE PORT PORT IMMUNITY to RF wireless communication equipment	385MHz-5785 MHz Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communication equipment	$d = \left[ \frac{3.5}{E_1} \right] \sqrt{P}$ $d = \left[ \frac{7}{E_1} \right] \sqrt{P}$ 80 MHz to 800 MHz 800 MHz to 2.7 GHz where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). a Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range. b Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic is affected by absorption and reflection from structures, objects and people.

a The ISM (industrial, scientific and medical) bands between 150 kHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz, 24,89 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.

b Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the device.

c Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3V/m.

### **Recommended separation distances between portable and mobile RF communications equipment and the device**

The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the device as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output of transmitter W	Separation distance according to frequency of transmitter m			
	150 kHz to 80 MHz outside ISM and amateur radio bands $d = \left[ \frac{3.5}{V_1} \right] \sqrt{P}$	150 kHz to 80 MHz in ISM and amateur radio bands $d = \left[ \frac{12}{V_2} \right] \sqrt{P}$	80 MHz to 800 MHz $d = \left[ \frac{3.5}{E_1} \right] \sqrt{P}$	800 MHz to 2.7 GHz $d = \left[ \frac{7}{E_1} \right] \sqrt{P}$
0.01	0.12	0.20	0.035	0.07
0.1	0.38	0.63	0.11	0.22
1	1.2	2.00	0.35	0.70
10	3.8	6.32	1.10	2.21
100	12	20.00	35	70

For transmitters rated at a maximum output power not listed above the recommended separation distance  $d$  in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where  $P$  is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

## Disposal

This product must not be disposed of as unsorted household waste. It is important to separate such waste for proper treatment and recycling, in compliance with local waste management regulations.

## **Warranty**

Products that you buy directly from our **Porodo** website or shop come with a 24-month warranty.

When you buy **Porodo** products from any of our approved sellers, you only get a 12-month warranty. If you want to extend this warranty, go to our website at <https://www.porodo.net/warranty> and fill out the form with your information. Don't forget to upload a picture of the product too. After we've checked and accepted your request, we'll send you an email to confirm that your product's warranty has been extended.

For more info, please check:  
<https://www.porodo.net/warranty>

## **Contact Us**

If you have any questions about this Privacy Policy, please contact us at:

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