EN

Compressor Nebulizer

User Manual

Model:

☐ A500LWD01 ☐ A500LWDC01
☐ A500LWD02 ☐ A500LWDC02
☐ A500LWD04 ☐ A500LWDC04
☐ A500LWD05 ☐ A500LWDC05

PLEASE NOTE:
THE MEDICAL DEVICE MUST BE USED ACCORDING TO USER MANUAL.

CE 0123

File No.: A500LWDC01 series CND-UM V 1.2 2025-06-27

Content

Information of Manufacturer and Authorized representative in the European Union

Company logo:

Shenzhen Aeon Technology Co., Ltd.
A301, Building A, Donghua Industrial Park, No. 5003, Bao'an Avenue, Sanwei Community, Hangcheng Street, Bao'an District, 518126 Shenzhen, CHINA.
Tel: +86-755-86182155
Customer Service E-mail: market@aeon-med.com Website: www.aeon-med.com

Shanghai International Trading Corp GmbH (Europe)
Eiffestrasse 80, 20537 Hamburg, Germany.
Tel.: +49-40-2513175
E-mail: shholding@hotmail.com

Table 1: Diagram of A500LWDC01 series compressor nebulizer

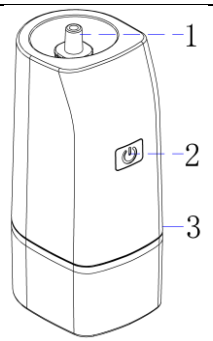
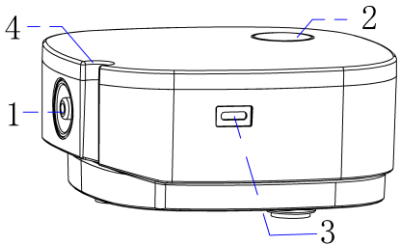
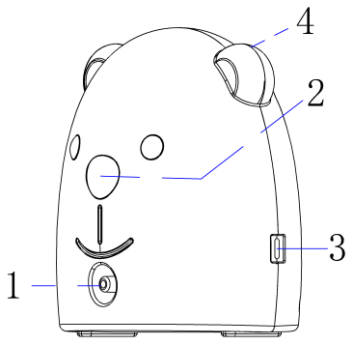
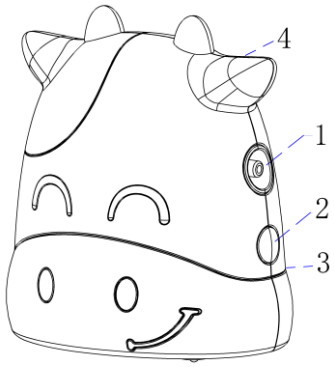
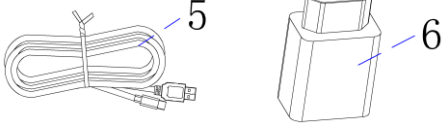
Model	A500LWDC01, A500LWD01	A500LWDC02, A500LWD02
Compressor Nebulizer Diagram		
Model	A500LWDC04, A500LWD04	A500LWDC05, A500LWD05
Compressor Nebulizer Diagram		
Accessories Diagram		

Table 2: Description of the number in the product diagram above

No.	Description	No.	Description	No.	Description
1	Tube connector	2	Power button	3	Charging cord connector
4	Tube bayonet	5	Charging cord	6	Adapter

Note: A500LWDXX Series Without Li-Ion Battery; A500LWDCXX Series with Li-ion Battery.

1 Safety

1.1 Important Safety Instruction Read before Use

The following basic safety precautions should always be taken.

(1) Close supervision is necessary when the product is used by, on, or near children, handicapped persons or invalids.

(2) Use the product only for the intended use described in this manual.

(3) Do not use the product if it is not working properly, or if it has suffered any damage.

1.2 Caution and Warning

(1) Read all instructions carefully before use. And follow the method specified in the manual. The following basic precautions are needed when using an electrical product.

(2) This device is not suitable for use in an anaesthetic breathing system or a ventilator breathing system.

(3) The types of liquid the device is designed to nebulize with compatible nebulizer kit are solution, and suspension.

(4) Only use the parts and accessories manufactured by the original manufacturer or meet the requirements of the instructions, otherwise it may increase the emission of the product or reduce the immunity. If the damage is caused by the use of accessories or parts that do not meet the requirements, the warranty will not be given.

(5) If the product fails, please refer to this manual. If the failure cannot be eliminated, please contact an authorized service center for repair.

(6) Unauthorized personnel shall not dismantle or install equipment. Li-Battery replacement requires a professional.

(7) Prohibition of modification of equipment.

(8) If the product is damaged or cracked, please do not use it.

(9) The product must use a power adapter that meets the requirements of this manual.

(10) To avoid the risk of suffocation, please keep children away from and touch the packaging. The product should be stored out of children's reach.

(11) Do not use the product near flammable gas, oxygen, or anesthetic mixture.

(12) Do not use the product s near high-frequency electromagnetic transmitters.

(13) Do not use the product in the shower or bath.

(14) Do not rinse the entire product under running water to prevent water from entering.

(15) Do not store the product under direct sunlight, high temperature or humidity.

(16) If you have diabetes or other diseases, please consult the corresponding doctor before using the product.

(17) Be careful with charging cord, which is prone to strangulation.

(18) Do not inhale or swallow small parts.

(19) Prevent children from accidental contact with this device.

(20) Do not use single-use contactable materials in ME devices more than once, as this may cause allergic reactions.

(21) The power supply must be placed in a place where it can be easily disconnected.

(22) Before starting treatment, please consult your doctor about the duration of use, dosage

of medication, frequency of treatment, etc.

(23) If there are contusions, burns, inflammations, wounds or sensitive parts, please consult the corresponding doctor before using the product.

(24) In the process of using the product, if you feel unwell, please stop using it immediately and consult the corresponding doctor.

(25) When using the product, please do not use it close to or stacked with other equipment.

(26) Please remove all packaging materials before use, and confirm that the parts and accessories of the product are complete.

(27) The product needs to be cleaned and disinfected before and after use. For details, please refer to the "chapter 4 Cleaning".

(28) If there is no liquid medicine in the nebulizer, do not operate the equipment.

(29) When using, keep the nebulizer as vertical as possible. A slight swing will not affect the use. Please do not move the unit during use.

(30) The compressor nebulizer connected nebulizer kit is legally marketed in the EU, works better when used with the nebulizer kit manufactured by Shenzhen Aeon Technology Co., Ltd.

(31) Please consult the corresponding doctor before using any medicinal products or drugs to ensure that they select the appropriate medicinal products for you.

(32) Clean medical gauze to wipe the moisture of the compressor to keep them dry to ensure safe use next time.

(33) Do not use a microwave oven to dry.

(34) Adapter should compliance with 60601-1, and class II for home use.

(35) Do not touch the compressor after briefly touching the compressor when turning on the device to prevent excessive temperature burns.

(36) The ME EQUIPMENT or ME SYSTEM is suitable for home healthcare environments and so on.

(37) Warning: Don’t 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.

(38) Warning: Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

(39) Warning: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased

electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

(40) Warning: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Compressor Nebulizer (A500LWD01, A500LWD02, A500LWD04, A500LWD05, A500LWDC01, A500LWDC02, A500LWDC04, A500LWDC05), including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

(41) If any: a list of all cables and maximum lengths of cables (if applicable), transducers and other ACCESSORIES that are replaceable by the RESPONSIBLE ORGANIZATION and that are likely to affect compliance of the ME EQUIPMENT or ME SYSTEM with the requirements of Clause 7 (EMISSIONS) and Clause 8 (IMMUNITY). ACCESSORIES may be specified either generically (e.g. shielded cable, load impedance) or specifically (e.g. by MANUFACTURER and EQUIPMENT OR TYPE REFERENCE).

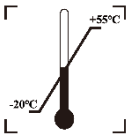
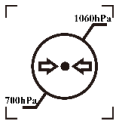
(42) If any: the performance of the ME EQUIPMENT or ME SYSTEM that was determined to be ESSENTIAL PERFORMANCE and a description of what the OPERATOR can expect if the ESSENTIAL PERFORMANCE is lost or degraded due to EM DISTURBANCES (the defined term “ESSENTIAL PERFORMANCE” need not be used).

(43) Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

1.3 Definitions and Symbols

Table 3: Symbol and Description

Symbol	Description	Symbol	Description
MD	Indicates the item isa medical device	UDI	Indicates a carry that contains unique device identifier information
SN	Indicates the manufacturer's serial number so that a specific medical device can be identified		Indicates the date after which the medical device is not to be used

Symbol	Description	Symbol	Description
	Indicates the medical device manufacturer		Indicates the date when the medical device was manufactured
Note	The important information you should know.		Follow the instructions for use
	Type BF Equipment	IP22	Anti-dust & Anti-water class
CE 0123	Notified Body with identification no.	EC REP	Indicates the authorized representative in the European Community/European Union
	Indicates the temperature limits to which the medical device can be safely exposed		Indicates the range of humidity to which the medical device can be safely exposed
	Indicates the range of atmospheric pressure to which the medical device can be safely ex-posed		Upward
	Indicates that caution is necessary when operating the device or control close to where the symbol is placed, or that the current situation needs operator awareness or operator action in order to avoid undesirable consequences		Symbol for When the end-user wishes to discard this product, it must be sent to separate collection facilities for recovery and recycling

2 Introduction

A500LWDC01 series compressor nebulizer, which creates a stream of air that travels directly or through tube to the nebulizer, intended to use at hospital, clinic and home. When air enters the nebulizer, it will convert the prescribed medication into aerosol mist for easy inhalation. The excited medicine forms an aerosol that passes through the mouthpiece or mask and can be inhaled by the patient. Its use is indicated whenever a physician or healthcare professional administers or prescribes medical aerosol products to a patient using a Small Volume Nebulizer. We encourage you to thoroughly read this guidebook to learn about the features of this product. Any use of this product other than its intended use should always be avoided.

2.1 Intended Use

The device is intended to provide a source of compressed air for medical purposes for use in hospital, clinic, or home environments. It is to be used with nebulizer kits to produce aerosol particles of medication for both children and adults.

Intended clinical benefit (indirect): Provide air to the pneumatic nebulizer, and then used in combination with the nebulizer kits to aerosolize medications.

2.2 Indications

Cystic fibrosis, chronic obstructive pulmonary disease (COPD), pneumonia and respiratory infection.

2.3 Contraindications

(1) Do not use for patients who are unconscious or are not breathing spontaneously.
(2) Do not use for patients with acute pulmonary edema.
(3) Do not use for patients who have completely lost the ability to spontaneously expectorate.
(4) Infants, premature neonate and newborns.
(5) Pregnant or breastfeeding women.
(6) Patient is allergic to aerosolized drugs.

2.4 Intended Patient Population

Adults, children

2.5 Intended users

Professional and lay person

3 Operating the Compressor Nebulizer

(1) Confirm your nebulizer model, A500LWD01, A500LWD02, A500LWD04, A500LWD05 need to use the proper adapter to work. And A500LWDC01, A500LWDC02, A500LWDC04, A500LWDC05 built-in lithium battery, can be turned on and work directly.
(2) The types of liquid (e.g. solution, suspension, and/or emulsion)
(3) Correct connection the nebulizer kit is legally marketed on the EU.
(4) Connect the charging cord to the charging cord connector of the compressor.
(5) Select the output to be 5V, 2A medical power adapter and connect the charging cord, plug the adapter into the power supply correctly.
(6) Press the power button, the LED indicator of the compressor nebulizer will light up.

(7) Now you can breathe slowly and deeply, if you hold your breath for a short time after inhaling the medicine, you can increase the effect of the treatment.

(8) During the treatment, keep quiet and relax, do not inhale too fast.

(9) Li-ion battery model low voltage, the indicator light becomes orange flashing reminder, should be charged in a timely manner, otherwise, the use of about 20 minutes to shut down, and at the same time will affect the effect of nebulizer. When charging, the indicator light becomes orange long light, after fully charged, the indicator light becomes green long light.

(10) A single treatment should not take more than 30 minutes.

(11) If there is a very small amount of medicine left in the nebulizer, press the power button to turn off the machine and stop inhaling. The LED indicator light of the nebulizer goes out.

(12) End of treatment.

(13) Wash the compressor after each use, let it dry (please refer to “4 Cleaning”)

(14) Storage.

4 Cleaning and disinfecting

4.1 Cleaning

Firstly, make sure that the charging cord is unplugged from the charging cord connector.

Disassemble the unit by removing the nebulizer kit.

The unit should be cleaned before and after each use with a damp cloth for 1 minute. Do not use any powdered cleaners or soap pads, this may damage the finish. The tube connector needs to be cleaned to ensure that there are no foreign objects that could block the gas during nebulization or allow dirt to enter the airway.

After that, gently shake off excess moisture, clean medical gauze or paper towels to wipe the moisture of the unit to keep them dry to ensure safe use next time.

Inspect unit for visible soil and repeat cleaning procedure if necessary.

Do not use a brush or pin to clean the unit.

Do not put the unit under the faucet for cleaning, and do not immerse the unit in liquid.

4.2 Disinfecting

Disinfect the parts once a week.

Disinfect the nebulizer by wiping it for 10 minutes with a damp cloth soaked in 75% alcohol or disinfecting ethanol.

Air dry completely before use or put away.

5 Troubleshooting

The A500LWDC01 series compressor nebulizer should be used by following the operation steps in the manual or using under the guidance of a doctor. Some common problems, faults and troubleshooting methods during the use of the equipment are shown in the following table:

Table 4: Troubleshooting

No.	Problems	Cause Analysis	Elimination method
1	Can't start on	1. Is the charging cord connected? 2. Whether the button has a card key 3. Whether the selection of the adapter is correct 4. Li-ion battery too low	1. Replace the adapter. 2. Please contact an authorized repair center or manufacturer 3. Choose the adapter whose output is 5V, 2A. 4. Charging Li-ion battery.
2	Loud noise	1. Not placed on a flat surface 2. The shock absorber is off	1. Place on a flat surface 2. Please contact an authorized repair center or manufacturer
3	Why does some medicine remain in the equipment after each use	Because when the device is automatically turned off, you will immediately stop inhaling the medicine	Normal
4	Does everyone have to use accessories individually	It is necessary to consider hygiene factors	It is recommended that each person must use their personal atomization accessories separately

6 Specifications

Table 5: A500LWDC01 series compressor nebulizer specification

Device name	Compressor nebulizer
Model	A500LWD01, A500LWDC01, A500LWD02, A500LWDC02, A500LWD04, A500LWDC04, A500LWD05, A500LWDC05
Dimensions (L×W×H)	A500LWD01: (48×59×119) mm, about 195g ± 2g

Weight (without accessories)	A500LWDC01: (48×59×119) mm, about 238g ± 2g
	A500LWD02: (112×120×56) mm, about 249g ± 2g
	A500LWDC02: (112×120×56) mm, about 293g ± 2g
	A500LWD04: (130×90×130) mm, about 302g ± 2g
	A500LWDC04: (130×90×130) mm, about 345g ± 2g
	A500LWD05: (127×90×139) mm, about 322g ± 2g
	A500LWDC05: (127×90×139) mm, about 365g ± 2g
Power	A500LWDC01, A500LWDC02, A500LWDC04, A500LWDC05: Input: AC 100-240V, 50-60Hz, Output: DC 5V, 2A Li-ion battery 3.8V, 2800mAh
	A500LWD01, A500LWD02, A500LWD04, A500LWD05: Input: AC 100-240V, 50-60Hz, Output: DC 5V, 2A
Normal Operating Pressure Range and Accuracy	Range: 40kPa ~ 100kPa (5.8 Psi ~ 14.5 Psi)
	Accuracy: ±5% of the value shown
Abnormal Operating Pressure Range	100kPa ~ 400kPa (14.5 Psi ~ 58.0 Psi), and no rupture of the tube body occurs
Aerosol Output Range and Accuracy	Range: ≥ 3.0 L/min
	Accuracy: ±10% of the value shown
Aerosol Output Rate	0.2 mL/min – 0.4 mL/min
Maximum Noise	Around 60 dB(A)
Operating Mode	Non-Continuous working (30mins on, 30mins off)
Service Life	Compressor nebulizer: 400 hours
	Li-ion battery: 300 times charging and discharging
Shelf life	2 years
Operating Environment	Temperature: +5°C to +40°C (+41°F to +104°F)
	Humidity: 25% to 93% RH (non-condensing)
	Air Pressure: 700hPa -1060hPa
Transport and Storage Environment	Temperature: -20°C to +55°C (-4°F to +131°F)
	Humidity: 25% to 93% RH (non-condensing)
	Air Pressure: 700hPa -1060hPa
Accessory	Standard Accessories: Charging Cord

	Optional Accessories: Adapter
Software	Name: Compressor embedded software Model: A500LWDC01 Version: V1.0

Note: This device is designed to nebulize with compatible nebulizer kit, using solution, suspension, or emulsion different from that recommended by the manufacturer, in particular, a suspension and/or high-viscosity solution, can alter the particle size distribution curve, the mass median aerodynamic diameter (MMAD), aerosol output, and/or aerosol output rate, which can then be different from those disclosed by the manufacturer.

7 Compatible devices used in combination

This device is designed to nebulize with model A-DA01 nebulizer kit, manufactured by Shenzhen Aeon Technology Co., Ltd. Technical data for the A500LWDC02 compressor with the A-DA01 Nebulizer kit:

Particle Size: MMAD Approx. 2.1μm (Albuterol Sulfate)

Maximum fill volume: 6mL ± 2mL

Aerosol Output Rate: 0.2 mL/min – 0.4 mL/min (by weight loss, 1% NaCl)

8 Warranty

The warranty period of the compressor nebulizer is 12 months from the date of sale (see the package for manufacturing date). We will not provide free warranty service for the failure caused by the user's reasons as follows:

- Any damage caused by improper use, battery leakage, failure to operate in accordance with the requirements or transfer of the compressor nebulizer to other users
- Failure caused by unauthorized disassembly or refitting of the product.
- Failure caused by dropping during use or handling.
- Failure due to lack of proper maintenance.
- Failure to operate in accordance with the correct instructions in the user manual.

Repair service beyond warranty will be charged accordingly. After-sale service unit: Shenzhen Aeon Technology Co., Ltd.

9 Disposal of device

Adhere to the applicable regulations when disposing of Compressor Nebulizer. This device must not be disposed of together with domestic waste. All users are obliged to hand in all electrical or electronic devices, regardless of whether or not they contain toxic substances, at a municipal or commercial collection point so that they can be disposed of in an environmentally acceptable manner. The unit and its accessories should be processed according to the local law and regulations at the stage of its life expectancy.

10 Comparison between models of compressor nebulizer

Table 6: Comparison between models of A500LWDC01 series compressor nebulizer

Model	A500LWD01, A500LWDC01	A500LWD02, A500LWDC02	A500LWD04, A500LWDC04	A500LWD05, A500LWDC05
PCB	A500LWDC01	A500LWDC02		
Schematic	A500LWDC01	A500LWDC02		
Power supply	Input: AC 100-240V, 50-60Hz; Output: DC 5V 2A; Li-ion battery: 3.7V, 2800mAh			

11 Manufacturer's Declaration of the EMC

IEC 60601-1-2:2014/AMD1:2020 ME EQUIPMENT and ME SYSTEMS identification, marking and documents for Class B product

(1) all necessary instructions for maintaining BASIC SAFETY and ESSENTIAL PERFORMANCE with regard to electromagnetic disturbances for the excepted service life.

(2) Guidance and manufacturer's declaration -electromagnetic emissions and Immunity.

Table 7: Guidance and manufacturer's declaration - electromagnetic emissions

Emissions test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	Class B
Harmonic emissions IEC 61000-3-2	Class A
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Compliance

Table 8: Guidance and manufacturer's declaration - electromagnetic Immunity

Immunity Test	IEC 60601-1-2 Test level	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air
Electrical fast transient/burst IEC 61000-4-4	Power supply lines: ±2 kV 100 kHz repetition frequency	Power supply lines: ±2 kV 100 kHz repetition frequency

Surge IEC 61000-4-5	line(s) to line(s): ±1 kV.	line(s) to line(s): ±1 kV.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% 0.5 cycle At 0º, 45 º, 90 º, 135 º, 180 º, 225 º, 270 º and 315 º 0% 1 cycle And 70% 25/30 cycles Single phase: at 0 0% 300 cycle	0% 0.5 cycle At 0º, 45 º, 90 º, 135 º, 180 º, 225 º, 270 º and 315 º 0% 1 cycle And 70% 25/30 cycles Single phase: at 0 0% 300 cycle
Power frequency magnetic field IEC 61000-4-8	30 A/m 50 Hz/60 Hz	30 A/m 50 Hz/60 Hz
Conduced RF IEC61000-4-6	150KHz to 80MHz: 3Vrms 6Vrms (in ISM and amateur radio bands) 80% Am at 1kHz	150KHz to 80MHz: 3Vrms 6Vrms (in ISM and amateur radio bands) 80% Am at 1kHz
Radiated RF IEC61000-4-3	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz
Proximity magnetic fields IEC 61000-4-39	30 kHz: 8A/m 134.2 kHz: 65A/m 13.56 MHz: 7.5A/m	30 kHz: 8A/m 134.2 kHz: 65A/m 13.56 MHz: 7.5A/m
NOTE U_T is the a.c. mains voltage prior to application of the test level.		

Table 9: Guidance and manufacturer's declaration - electromagnetic Immunity

	Test Frequency (MHz)	Band (MHz)	Service	Modulation	Maximum Power(W)	Distance (m)	IEC 60601-1-2 Test level (V/m)	Compliance level (V/m)
Radiated RF IEC61000-4-3 (Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment)	385	380–390	TETRA 400	Pulse modulation 18 Hz	1,8	0.3	27	27
	450	430–470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	2	0.3	28	28
	710	704–787	LTE Band 13, 17	Pulse modulation 217 Hz	0,2	0.3	9	9
	745							
	780							
	810	800–960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE-Band 5	Pulse modulation 18 Hz	2	0.3	28	28
	870							
	930							
	1720	1700–1990	GSM 1800; CDMA 1900;	Pulse modulation 217 Hz	2	0.3	28	28
	1845							
	1970							

			GSM 1900; DECT; LTE-Band 1, 3, 4, 25; UMTS					
	2450	2400 – 2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28	28
	5240	5100 – 5800	WLAN 802.11 a/n	Pulse modulation 217 Hz	0,2	0.3	9	9
	5500							
	5785							

Table 10: Guidance and manufacturer's declaration - electromagnetic Immunity		
Test frequency	Modulation	IMMUNITY TEST LEVEL (A/m)
30 kHz	CW	8
134,2 kHz	Pulse modulation [a] 2,1 kHz	65 [b]
13,56 MHz	Pulse modulation [a] 50 kHz	7,5 [b]
a) The carrier shall be modulated using a 50% duty cycle square wave signal. b) r.m.s., before modulation is applied.		