



# Genlantis CoolCLAVE™ Plus

## Personal Ozone and UV Sterilizer

Catalog #	Description/Content	Quantity	Related Products	Catalog #
E330110	CoolCLAVE™ Plus Ozone & UV Sterilizer, 110V	1 Unit	CoolCLAVE™ Plus UV Lamp, 1 each	E330UV1
E330220	CoolCLAVE™ Plus Ozone & UV Sterilizer, 220V	1 Unit	Ozilla™ Ozone Sterilizer, 110V	E400110
			Ozilla™ Ozone Sterilizer, 220V	E400220
			BioCooler™ Cold Box, 48 x 1.5 ml tubes	E100100
			BioCooler™ Cell Storage Box, 42 x 2.0 ml cryogenic tubes	E100200
			Mini BioCooler™ Cold Box, 8 x 1.5 ml tubes	E100300
			BioCooler Midi Cold Box, 12 x 2.0 ml tubes	E100500
			Dr. Spin Personal Centrifuge-Teal	E200200

  

<b>Shipping and Storage:</b>	CoolCLAVE™ Plus is shipped at room temperature.
------------------------------	---

**INTRODUCTION:** CoolCLAVE™ Plus is a unique and innovative laboratory bench top sterilizer from Genlantis, and a substantial improvement on the original and successful CoolCLAVE™. The new CoolCLAVE Plus uses a special light bulb that produces both UV and ozone gas to clean\* laboratory tools, especially ones involved in sensitive experiments or assays, and it has an added heating function as well. It is effective in keeping sterile, or sterilizing lightly contaminated pipettes, pipette tips, gloves, plates, small instruments, and even personal items such as keys and glasses. To disinfect items, simply place them inside the CoolCLAVE Plus Sterilizer and press the appropriate cycle button. The anti-microbial properties of simultaneous ozone gas and UV light provide a dual and powerful sanitizing effect capable of eliminating more than 98% of common pathogenic organisms (bacteria, fungus, virus, etc.) in 30 minutes†. The antimicrobial properties of ozone also eliminate the odors produced by various organisms providing a deodorizing effect as well. Best of all, the CoolCLAVE Plus sterilizer is very safe and efficient, does not use any liquids, harsh chemicals, or heat, and does not damage any surfaces or leaves any chemical residues behind.

### Note and Disclaimer

\*The Genlantis CoolCLAVE™ Plus Personal UV and Ozone Sterilizer is not a replacement or substitute for autoclaves, and should not be used to sterilize equipment for use in medical or surgical applications of any kind. The CoolCLAVE Plus sterilizing cycles can eliminate most surface contaminants, especially bacterial and fungal, but only at lower densities that are typical in normal operating environments, such as lab benches or general surfaces. Genlantis makes no claims and offers no guarantees of any kind that a CoolCLAVE cycle(s) will eliminate 100% of all contaminants and under all possible circumstances.

† Sterilization cycles are 30 minutes long, followed by 30 minutes of heat and/or ozone gas dissipation as per instructions below.

## PRECAUTIONS

- Read all instructions before using the appliance. Use this appliance only for its intended use as described in this manual.
- Do not attempt to operate the CoolCLAVE™ Plus with the door open. Do not tamper with the door seal or latch mechanism.
- The CoolCLAVE Plus unit emits ozone gas when operating. **TO AVOID EXPOSURE TO OZONE, CAREFULLY FOLLOW INSTRUCTIONS IN OPERATIONS SECTION BELOW.**
- Do not operate this appliance if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
- Do not store this appliance outdoors, or use it near water— for example near sinks or water baths.
- Do not immerse cord or plug in water; keep cord away from heated surfaces.
- Do not attempt to repair or open the unit unless you are a qualified repair technician.

## TECHNICAL DETAILS

Electrical Specifications	E330110: 110 volts AC, 50 Hz. 85W.	E330220: 220 volts AC, 60 Hz. 85W.
UV Lamp Specifications	UV-C T5 glass; G5 base 2-pin; 4Watts	185 nm wavelength, 8.3µW/cm <sup>2</sup> @ 1M
Outside Dimensions (Width x Depth x Height)	11 x 11½ x 14½ (279 x 292 x 359 mm)	
Inside Chamber Dimensions (W x D x H)	8½ x 8¼ x 8¾ (216 x 210 x 222 mm) – 12L capacity	
Weight	7.7 lbs. (3.5 kg.)	
Operating cycles	Heat: 30 minutes;	Ozone/UV: 30 minutes      Auto: 15 min heat + 15 min Ozone/UV.
Specifications	Maximum temperature = 55°C	Ozone maximum = 24 ppm      UV wavelength = 254 nm
Warranty	1 year	

# CoolCLAVE™ Plus Ozone and UV Personal Sterilizer Manual

## OPERATION

1. Plug power cord into wall outlet, open the door and place objects to sterilize inside the chamber on either bottom or upper shelf. Items on upper shelf will be more readily exposed to UV light radiation.

**NOTE:** because the CoolCLAVE™ Plus uses UV light and ozone gas, you are able to safely and effectively sterilize the surfaces of most types of materials such as plastics, metals, paper products, pipet tip boxes, and even agar plates. Inversely, the CoolCLAVE Plus is not able to sterilize any liquids or solutions.

2. Close the CoolCLAVE Plus door and press the [Power] button on the face of the unit. Select the appropriate cycle as follows:
  - a. **[Heat]:** this cycle is used to keep certain items warm and runs for 30 minutes. The run can be interrupted or shortened by pressing the [Power] or the [Heat] button.  
**CAUTION:** to avoid injury, do not handle items, especially highly conductive materials like metal, without appropriate hand protection immediately after a Heat run.
  - b. **[UV + Ozone]:** this cycle is used for sterilization and runs for 30 minutes (**please see Section “d” below before running this cycle**).  
**IMPORTANT NOTE:** after each 30-minute run is finished, or if cycle is interrupted manually, allow a full 30 minutes for the ozone gas to convert back to oxygen before opening the CoolCLAVE Plus door.
  - c. **[Auto]:** this cycle is used for sterilization and for warming up of items. In this cycle, the unit will heat up for 15 minutes, followed by 15 minutes of UV + Ozone sterilization (**please see Section “d” below before running this cycle**).  
**IMPORTANT NOTE:** after each 30-minute run is finished, or if cycle is interrupted manually, allow a full 30 minutes for the ozone gas to convert back to oxygen before opening the CoolCLAVE Plus door.
  - d. **FOLLOW THIS INSTRUCTION CAREFULLY:** If either UV + Ozone or Auto cycles are selected, make sure to affix a copy of the “CAUTION” page (attached to the back end of this manual) to the door of the CoolCLAVE Plus unit. This serves as an important reminder for others not to accidentally open door of unit while running a sterilization cycle, and to avoid unnecessary exposure to irritating levels of ozone gas.

## MAINTENANCE

The CoolCLAVE™ Plus is a very low maintenance unit and does not require any scheduled or regular maintenance.

- (a) Keep your CoolCLAVE Plus unit clean at all times by wiping the interior and exterior surfaces with a water dampened towel. To avoid damaging the unit, do not use any detergents or solvents.
- (b) Unplug the unit from the power outlet when the CoolCLAVE Plus is in storage or will not be used for extended periods of time.
- (c) Avoid damaging the unit by putting heavy objects on top of it.
- (d) Replacing UV-C light Bulbs: The CoolCLAVE Plus units use a special UV-C light bulbs that produce ozone. Please contact Genlantis to obtain the correct light bulb replacement.
- (e) **IMPORTANT: UV bulb waste disposal:** At the end of rated life, when this lamp is removed from service it will be subjected to the current Toxic Characteristic Leaching Procedure (TCLP) prescribed by the Environmental Protection Agency. According to TCLP tests these UVB lamps are considered hazardous waste under the Universal Waste Rules. Generators should evaluate all of the disposal options, which may be available in the particular country, state, or city in which the generator’s facility is located. The generator should check with federal, state and local officials for their guidance.

The purchase price paid for the CoolCLAVE™ Plus grants end users a non-transferable, non-exclusive license to use the unit in a **research laboratory setting, and for sterilizing purposes only** as described in this manual. This use license excludes and without limitation, resale, repackaging, or modification of the unit in any way and without prior notification of and approval by Genlantis.

Under no circumstances shall the CoolCLAVE Plus unit be used on food or drink products intended for **human or animal consumption**. At all times, care and attention should be exercised in handling and using the CoolCLAVE unit by following the instructions in the manual, using common sense lab practices, and wearing protective lab clothing and eyewear as needed.

Purchasers may refuse this license by returning the CoolCLAVE Plus unit unused and its original packaging. By keeping or using the CoolCLAVE unit, you agree to be bound by the terms of this license. The laws of the State of California shall govern the interpretation and enforcement of the terms of this license.

**Genlantis Establishment is registered under Environmental Protection Agency (EPA) ID Number 91845-CA-001**

# CAUTION

**UV and Ozone sterilization in progress  
Do NOT open door until this sign is removed**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Time Sterilization Cycle Started:** \_\_\_\_\_

**Expected Cycle Completion:** \_\_\_\_\_