Vacc-Safe | Biomedical

CO₂ Incubator

Science for life



CO2 I NCUBATOR

CO, Incubator

Scope of Application

Vacc-Safe incubators provide a safe, reproducible growth environment for cell cultures with unsurpassed natural simulation to ensure optimum growth conditions at all time.



VSI-120



VSI-180



Key features

LED Control

Intelligent Control for CO₂ density, Temperature, Alarm, Automatic Decontamination.

Precise Temperature Control

Equipped with microcomputer PID control system and 4 sensors, precisely control the cooling and heating temperature with 0.1℃ accuracy.

304 Stainless Steel Interior

Safe perforated shelves with anti-slip design, allow internal air flow freely. Abrasive and corrosion resistance, easy to clean.

Dual-Beam IR CO₂ Sensitive Control

Dual-beam IR sensor with high temperature resistance, work with NDIR measurement principle, track and monitor the CO₂ density accurately, insusceptible to temperature and humidity.

Alarm System

Temperature alarm; CO₂ concentration alarm; Door ajar alarm.



125°C Dry-heat Sterilization

125°C dry heat sterilization, which has been verified by the market for a long time to ensure the stability of the sensor within the effective life cycle and the effectiveness of sterilization. No need disassembly or manual calibration

Excellent uniformity of temperature, gas and humidity

Fan motor on the top and heat system in 6 sides of cabinet, ensure homogeneous conditions throughout the entire chamber.

Inner glass door

Easy to observe inner samples. Reduce the disturbance of the incubation conditions. Decrease gas consumption and the risk of contaminants entering inside.

Outer Door

Foaming door: Good insulation performance, energy saving, reduce noise.

Easy to clean

Rounded corner allows easy cleaning. The entire chamber is made of stainless steel (SUS304).

Product Advantages

Precise and Accurate Temperature Control

Equipped with microcomputer PID control system and 4 sensors, precisely control the cooling and heating temperature with 0.1C accuracy. It can provide a stable temperature to ensure the normal growth of cells throughout their life cycle.



Natural Air and Moisture Convection

Natural Air and Moisture Convection Air and Moisture in chamber are distributed naturally by 6 side heating, air circulation fan.



125°C Dry-heat Sterilization

Easy and effective sterilization of microorganisms at 125°C. 6-sided heating, no need to dissemble internal components (including CO₂sensors) and decontaminate separately, thus avoiding secondary pollution.



HEPA filter

All gas injection lines are filtered via HEPA filter to remove impurities before being injected into the chamber. The filter is very efficient to entrap 99.97% particulates larger than 0.3 μ m.



Anti-Condensation Heating System to Reduce Pollution Risk

The door on the CO_2 incubator radiates heat to the inner glass door, effectively preventing the glass door from forming condensation. The possibility of microbial contamination caused by the condensate water is eliminated.

Precise CO₂ Concentration Using IR Sensitive Control

Built-in temperature and humidity compensation technology reduces the impact of changes of humidity and temperature without the need for calibration after the high temperature sterilization. Compared with traditional single beam IR, dual-beam IR is more stable and accurate.



Specifications

Model	VSI-120	VSI-180	VSI-260
Display	LED Display	LED Display	LED Display
Chamber volume	120L	180L	260L
Temp. Range	RT+5~60℃	RT+5~60℃	RT+5~60℃
Temp. Accuracy	±0.1°C (37°C)	±0.1°C (37°C)	±0.1°C (37°C)
Temp. Resolution	0.1°C	0.1°C	0.1°C
Temp. Control	Digital PID	Digital PID	Digital PID
Temp. Uniformity	±0.3℃ (37℃/ RT.20℃)	±0.3℃ (37℃/ RT.20℃)	±0.3℃ (37℃/ RT.20℃)
Heating Capacity [W]	320	320	610
CO ₂ Range	0% ~ 20%	0% ~ 20%	0% ~ 20%
CO ₂ Accuracy	±0.1% (5%/37°C)	±0.1% (5% / 37°C)	±0.1% (5% / 37°C)
CO ₂ Resolution	O.1%	O.1%	O.1%
CO ₂ Sensor	IR CO ₂ Sensor	IR CO ₂ Sensor	IR CO ₂ Sensor
CO ₂ Inlet pressure range	0.3~0.5bar	0.3~0.5bar	0.6~0.7bar
Number of shelves	2/4	3/8	3/8
Chamber dimension [WxDxH]	320x350x375 mm	473x528x710 mm	530x590x900 mm
Overall dimension [WxDxH]	420x460x570 mm	560x620x945 mm	630x680x1125 mm
Weight	38 kg	80 kg	115 kg
Jacket type	Air Jacket Type (6 sides heat)	Air Jacket Type (6 sides heat)	Air Jacket Type (6 sides heat)
Chamber material	Stainless Steel (304)	Stainless Steel (304)	Stainless Steel (304)
Sterilization	125℃ dry hot air sterilization	125℃ dry hot air sterilization	125℃ dry hot air sterilization



Factory 1 13-15 Kevlar Close Braeside VIC 3195 1300 459 140