



LABPRO-109 SEED GERMINATOR (SINGLE CHAMBER)

We are manufacturers of seed germinators in India since more than two decades. .

WITH DIGITAL TEMR CONTROLLER Most suitable for conducting various experiments on a variety of seeds under different conditions of Temperature and humidity. Atmospheric conditions are created within the chamber to perform different Experiments without going onto the field. The double walled unit has inner chamber made up of anodized Aluminum or S.S. And outer chamber of M.S. Sheet duly painted. Temperature from 5°C to 50°C + 1°C is Controlled by DIGITAL TEMER INDICATOR -cum-CONTROLLER. Humidity (NOT ADJUSTABLE) is created in A S.S. Water reservoir fitted at the bottom to provide 90% to 95% + 3% RH Humidity. Supplied complete With 14 adjustable perforated trays. Complete with cord and plug to work on 220/230 V A.C. Supply

Beside the normal germination applications our seed germinators are fit to be used for various applications tests involving micro-organisms, plants, tissues, electronic components etc apart from various customized industrial and research applications.

Our seed germinator have a variety of usage in R & D laboratories, research studies and product testing facilities across the globe.

Apart from that, these seed germinator have a variety of usages in tissue culture applications, enzyme reaction studies, growth observation studies, fermentation analysis and various other general and specialized applications in various laboratories.

We specialize in both standard and customized models, specifically designed to meet the challenging demands of various scientists for individual and specialized research applications.

Over a short period of time Weiber brand have been established as reliable exporters of seed germinator in India, catering to the vast markets in South East Asia, Middle East, Africa and Europe.

Apart from that we are supplying our seed germinator in India, catering to a variety of customers ranging from Defence Installations, Research Laboratories, Educational Institutes and various R& D laboratories of leading national and multinational companies.

Salient Features:

- Reliable
- Precise Control Of Environmental Parameters
- Micro-processor based Controllers
- Aesthetically designed.
- Corrosion Resistant interior and exteriors
- Energy Efficient
- CFC free cooling
- Sturdy Construction
- Low Maintenance
- Light Weight

Construction Details:

SSU- seed germinator are double walled convection heated and cooled units(Double/Single chamber Units). Outer body of our seed germinator are constructed out of thick PCRC sheet duly pre-treated with primers and rust proofing and painted with long lasting stove enamel or elegantly powder coated. The inner chamber is made of heavy gauge stainless steel sheet of SS-304 grade or anodized aluminum sheet or G.I. (as per the customer's requirements). The gap between the walls is filled high grade mineral glass wool, which ensures maximum thermal efficiency in our walk in incubators

The unit is provided with two doors, the inner door is made of thick plexi glass/float glass, to view the specimens/culture media/stocks, without disturbing the temperature of the chamber. This door is provided with magnetic door closer. The outer door is made of mild steel sheet lined with stainless steel from inside. This door is provided with lock and key arrangement. The unit is mounted on a sturdy steel frame The unit is provided with various customized shelves in

various permutations and combinations to suit individual requirements. The triple walled back of our seed germinator are provided with two/Four/Six/Eight (size specific) air circulation fans for uniform maintenance of the temperature throughout the chamber. The unit is provided with 14 trays stainless steel (grades-304) in single chamber models and 28 stainless steel trays in double chambers. However we can customize the same as per the individual requirements.

Heating:

Indirect heating system is provided in our units, comprising of air heaters made of high grade Kanthal A-1 wires of suitable wattage. The warm air is evenly distributed throughout the chamber through efficient motor fans ensuring a very good temperature sensitivity.

Cooling:

An energy efficient cooling unit is installed in our seed germinator to enable bio chemical demand, cyclic and growth studies at lower room temperatures. We use ISI marked high end CFC free compressors of Kirloskar/Tecumseh make, conforming to latest international standards and guidelines.

Humidity:

Humidity generation provision is incorporated in our seed germinator The humidity is generated by means of aerosol humidity generator with efficient humidity controller cum indicator.

Humidity Range:

From Ambient to 95% (As per the temperature Requirements)

Humidity Sensitivity:

Humidity is controlled by mean of an electronic humidity controller cum indicator with an accuracy of + 5%.

Temperature Control:

The temperature inside our seed germinator is controlled through programmable micro-processor based temperature controller cum indicator. Both the chambers have their individual control modules.

Temperature Range:

Temperature range of our standard seed germinator models are 5° c above ambient to 60° c.(In one chamber) / 5° c to 60° c(in second chamber). However we have the capacity to modify the same to suit the individual specialized requirements of our customers.

Temperature Sensitivity:

Temperature inside our seed germinator are controlled with a sensitivity of $\pm 0.5^{\circ}\text{C}$ or better

Illumination:

Our seed germinator are provided with door operated illumination system comprising of fluorescent lights, beside two panels of diffused fluorescent light panel located at the either side of the chamber to enable the user to conduct the photo periodic tests and experiments.

Illumination Control:

The illumination is controlled through solid state cyclic timer to control the photoperiodic cycle of the chamber.

Front Panel:

Front panel of our units comprises of on/off switches heating, cooling and mains indicator lamps, temperature controllers and voltmeters.

Technical Matrix For Seed Germinator:

Temperature Control	-	-
Temperature Sensitivity	± °C	0.5 or better
Spatial Deviation In Temperature	± °C	0.5 or better
Readability	°C	0.1
Temperature range	°C	5°C to 60°C /5°C above ambient to 90°C (Standard)
Temperature Sensor	-	PT-100
Temperature Controller	-	Solid State digital Controller/PID optional
Display	-	LED/LCD
Adjustable alarm limits	-	Optional With PID controller only.
Water quality	-	Distilled / Ionized
Safety thermostats	-	-
Temperature variation Adjustments	-	3 (With PID Controllers only)
Temperature Sensors	-	PT-100
Automatic temperature setting	-	Yes (With PID Controllers only)
Adjustable limits	-	Yes (With PID Controllers only)
Light control	-	-
Readability or Set ability	%	10% (optional feature)
Light intensity (Middle chamber)	Lux	As Desired (optional feature)
Light intensity (Both Sides)	Lux	As Desired (optional feature)
Accessories	-	-
De-icing module	-	Optional

Accessories	-	-
De-icing module	-	Optional
Timer (999 mins)	-	Optional
Program (Real Time)	-	Optional
Data Acquisition Program	-	Optional
Serial Port (Printer)	RS232C	Optional
Inspection window in door	-	Optional
Water reservoir	litres	18 ltr
Shelves	-	-
Standard	-	14 (Single chamber)/28 (Double Chamber)
Internal Dimensions	mm	Model Specific
Maximum Permitted load per shelf	Kg	5kg
Maximum Permitted total load	Kg	160kg
Accessories	-	-
Printer Report Program	-	Optional
2 x 24 characters LCD Display	-	Optional
Access Port 30 mm	-	Optional
Castors, lockable	-	Yes

Power consumption	-	-
Nominal power	W	950
Nominal voltage	V	220-230 Volts, 50 Hz Single Phase
Frequency	Hz	50

Inside Dimensions:555 x 605 x 910 mm (W x D x H)