

LEEC Plant Growth / Germination Cabinets are based on LEEC Precision Cooled Incubators. Day and night conditions are automatically simulated and can be easily programmed.

TEMPERATURE CONTROL

All plant growth cabinets use the same temperature control systems as the Precision Cooled Incubators on which they are based. The dual set point temperature controller is cycled by a digital timer. An over and under temperature protection system with alarms is fitted as standard. Chambers are fan assisted for optimum temperature performance and stability, which in turn provides reliable, accurate storage for samples. Temperature performance can be marginally affected during the 'lights on' cycle due to a small amount of heat from the lights radiating into the growth chamber.

ILLUMINATION

All models are fitted with a digital timer to control the day/night cycle of lights on and off. Each incubator door is fitted with one pair of white fluorescent tubes. These give a lighting intensity of approximately 3000 lux on each shelf. For higher lighting intensities and specialised applications, extra lights (or UV tubes) can be factory fitted. All lights are mounted vertically in the outer door which is vented at the top and bottom. This means that the unwanted heat can escape into the laboratory. Cabinets fitted with four or more lights in each door also have a small extract fan in the door to help remove heat. This helps to maintain stable control, especially at lower chamber temperatures.

HIGH HUMIDITY MODELS

Two models (SL2 and SL3) are sealed chamber versions of models PL2 and PL3 respectively and should be used for high humidity applications. Their sealed, water-tight chambers are necessary when high levels of humidity are required inside the chamber.

ACTIVE HUMIDITY CONTROL

Processes requiring precise humidity control can be achieved with ultrasonic humidity control (/RH). Models SL2 and SL3 can be ordered with ultrasonic humidity control (/RH). A digitally controlled ultrasonic fine mist humidity generator increases the humidity inside the chamber as needed. This gives the LEEC system outstanding accuracy but with economical use of water. The humidity generator has no moving parts, giving it improved reliability. An external water reservoir is included with all /RH models.

Standard Features:

- Microprocessor controller with digital display
- Stainless steel chamber and shelves
- Digital over & under temperature protection
- Inner glass doors
- Two 12mm cable access ports
- Energy efficient heating and cooling systems
- Fan assisted
- High quality thermal insulation
- 24 hour / 7-day digital timers

Model PL3





Options / Accessories:

- Additional lighting
- Ultraviolet (UV) tubes
- Digital Data Recorder
- Humidity control
- Additional shelves



	PL2 / SL2	PL3 / SL3	PL33
Temperature * Range (lights off) Range (lights on) Control Variation Refrigerant	0°C to +60°C +5°C to +60°C Typically $\pm 0.2^{\circ}\text{C}^*$ Typically $\pm 0.5^{\circ}\text{C}^*$ R134a	0°C to +60°C +5°C to +60°C Typically $\pm 0.2^{\circ}\text{C}$ Typically $\pm 0.5^{\circ}\text{C}$ R134a	0°C to +60°C +5°C to +60°C Typically $\pm 0.2^{\circ}\text{C}$ Typically $\pm 0.5^{\circ}\text{C}$ R134a
Timers	Digital (24 hour / 7 day)	Digital (24 hour / 7 day)	Digital (24 hour / 7 day)
Construction Chamber Exterior Access Port Insulation	Stainless steel White painted steel Two 12mm ports CFC-free	Stainless steel White painted steel Two 12mm ports CFC-free	Stainless steel White painted steel Two 12mm ports CFC-free
Chamber Capacity	150 L	320 L	730 L
Sealed Chamber	SL2 only	SL3 only	No
Castors	No	No	Yes
Shelves Included	4	6	6
Inner Glass Doors	1	2	4
External Dimensions (H x W x D mm)	1075 x 635 x 660	1745 x 635 x 660	1745 x 1270 x 660
Internal Dimensions (H x W x D mm)	590 x 510 x 490	1275 x 510 x 490	1275 x 1140 x 490
Weight	100 KG	145 KG	250 KG
Power Rating	900 Watts	900 Watts	1250 Watts
Electrical Supply	220/240V AC 50 Hz	220/240V AC 50 Hz	220/240V AC 50 Hz
Warranty	1 year	1 year	1 year

* Temperature specification for model PL2 and SL2 at 20°C ambient.