

### **Plant Growth / Germination Cabinets**

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



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### **Options / Accessories:**

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



|                            | •                         |                           |                           |
|----------------------------|---------------------------|---------------------------|---------------------------|
|                            | PL2 / SL2                 | PL3 / SL3                 | PL33                      |
| Temperature *              |                           |                           |                           |
| Range (lights off)         | 0°C to +60°C              | 0°C to +60°C              | 0°C to +60°C              |
| Range (lights on)          | +5°C to +60°C             | +5°C to +60°C             | +5°C to +60°C             |
| Control                    | Typically ±0.2°C*         | Typically ±0.2°C          | Typically ±0.2°C          |
| Variation                  | Typically ±0.5°C*         | Typically ±0.5°C          | Typically ±0.5°C          |
| Refrigerant                | R134a                     | R134a                     | R134a                     |
| Timers                     | Digital (24 hour / 7 day) | Digital (24 hour / 7 day) | Digital (24 hour / 7 day) |
| Construction               | 3 11 ( 11 ) 11 //         | 8 11 ( 11 ) 11 //         | 311 ( 111 ) 111 )         |
| Chamber                    | Stainless steel           | Stainless steel           | Stainless steel           |
| Exterior                   | White painted steel       | White painted steel       | White painted steel       |
| Access Port                | Two 12mm ports            | Two 12mm ports            | Two 12mm ports            |
| Insulation                 | CFC-free                  | CFC-free                  | CFC-free                  |
| modiation                  | Cre mee                   | Cre free                  | Ci C ii C                 |
| 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                         |
| <b>External Dimensions</b> |                           |                           |                           |
| (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         |
| Woight                     | 100 KG                    | 145 KG                    | 250 KG                    |
| Weight Poting              |                           |                           |                           |
| Power Rating               | 900 Watts                 | 900 Watts                 | 1250 Watts                |
| Electrical Supply          | 220/240V AC               | 220/240V AC               | 220/240V AC               |
| Manusaha                   | 50 Hz                     | 50 Hz                     | 50 Hz                     |
| Warranty                   | 1 year                    | 1 year                    | 1 year                    |

<sup>\*</sup> Temperature specification for model PL2 and SL2 at 20°C ambient.



Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.