



Plant Growth Chamber LD-LPGC-D20

Labodam Equipment Ltd.
info@labodam.com | www.labodam.com

Plant Growth Chamber LD-LPGC-D20

Overview

The Plant Growth Chamber LD-LPGC-D20 is a large-capacity, programmable environmental chamber designed to precisely control temperature, humidity, and illumination for advanced plant growth and biological research.

Features:

- Microcomputer controller with 9 operating modes and automatic day/night cyclic switching
- Real-time LCD display for clear parameter monitoring
- Stainless-steel inner chamber with cold-rolled steel exterior, polyurethane foam insulation; corrosion-resistant, easy to clean, adjustable shelf spacing
- LED lighting with 400–800 nm wavelength range, peak at 445 nm, main wavelength 650 nm
- Branded compressor with full copper heat exchanger, using eco-friendly, fluorine-free refrigerant
- Horizontal gentle-breeze air outlets with vertical air return for uniform airflow at all shelf levels
- Ultrasonic humidifier with external large-capacity water tank
- Audible/visual alarms for over-temperature, under-temperature, and sensor faults
- Automatic forced shutdown after 90 minutes if parameters fail to return to normal range

Applications:

Ideal for plant development, seed germination, seedling cultivation, microbiological studies, insect and small animal rearing, and BOD analysis in water quality monitoring. Widely used in aquaculture, animal husbandry, agriculture, forestry, and biotechnology research.

Specifications:

Display	LCD Touch Screen
Net Weight	250 kgs
Illuminance	Up to approx. 20,000 lx
Refrigerant	CFC free (R404a 50HZ)/(R134a 60HZ)
Gross Weight	265 kgs
Power Supply	AC 220 V, 50/60 Hz
Time Setting	0~99hrs59mins / Continuous operation
Lighting Type	Multi-sided LED illumination
Chamber Volume	1000 L
Humidity Range	50 – 95 % RH
External Material	Cold-rolled Steel Plate with Electrostatic Spraying

Power Consumption	Approx. 2424 W
Temperature Range	Without lighting: 0 – 50 °C With lighting: 10 – 50 °C
Humidity Fluctuation	±3 – ±7 % RH
Operating Environment	Ambient temperature 10 – 30 °C
Inner Chamber Material	Stainless Steel
Temperature Resolution	0.1 °C
Temperature Uniformity	±1 °C (no-load)
Shelves (Standard / Max.)	3 / 12
Light source/lighting method	LED/3-sided illumination
Working environment temperature	10~30°C
External Dimensions (W × D × H)	1300 × 780 × 1830 mm
Internal Dimensions (W × D × H)	1200 × 620 × 1200 mm