LABWIT®

PREMIUM
Plant Growth
CHAMBER

ZXLP-R1270

ADVANCED SOLUTIONS
FOR SCIENTIFIC DISCOVERY

ACCURACY - RELIABILITY - FLEXIBILITY

Introduction

The LABWIT ZXLP Plant Growth Chambers are available in four models, offering precise control of temperature, and light. They feature LED light panels with multiple color options, configured on three sides: the outer door and two sidewalls. The LED lighting system is customizable to suit your application, with a wavelength range from less than 400nm to 700nm, ideal for strong vegetative and generative growth, enhancing vernalization, and providing a broad sun-like spectrum for research and biotech applications.

Available in sizes from 90L to 430L internal capacity, these chambers are designed to occupy minimal floor space, optimizing your laboratory's layout. The 4.3-inch touch screen interface facilitates easy programming with alarms and non-volatile memory, and includes a built-in printer.

LABWIT is dedicated to environmentally efficient design, using cutting-edge green technologies for proven cost savings and energy efficiency. The chambers are insulated with CFC-free polyurethane foam, ensuring high thermal retention and reducing the load on your lab's HVAC systems.

A variety of options and accessories allow you to customize the chambers to your specific needs. Popular options include programmable/dimmable LED light panels available in Cool White, Warm White, red (660 nm), and blue (420 nm) dual lighting, extra grid plates, and RS485 options.

Features

- P.I.D. microprocessor ensures the precision of operational parameters control under both fixed value mode and program mode.
- 4.3" TFT touch screen panel displays all parameters, easy operation and readout for all control modes.
- Light configuration available from front door, side walls.
- LED lighting panel system features fully adjustable lighting output between 0-100%, in application up to 500 µmol/m/s subject to light source selection.
- Light intensity control programmable for day/night photoperiods.
- 3D airflow circulation assuring an optimal temperature uniformity of ±1.0°C@37°C, also through multi stepped growth surfaces, reducing tension between plants
- Stainless steel internal construction with powder coated steel external surfaces
- Internal glass door allows users to visually located required samples, minimizing door opening times allowing rapid return to set conditions
- Sound cooling system with CFC free refrigerant and automatic defrosting system.
- Real-time electronic timer from 0 to 9999 minutes.
- Non-volatile memory retains pre-set parameters in case of power interruption.
- All shelves, shelf supports and guide rails are easily removable and can be autoclaved to remove contamination.

Specifications

	ZXLP-R1090	ZXLP-R1160	ZXLP-R1270	ZXLP-R1430
Volume	90L	160L	270L	430L
Door Type	Solid outer door with heat resistance glass inner door			
Control Panel	4.3" TFT Touch Screen			
Ambient TEMP.	5-35°C			
Noise Level	<55 dB (1m above floor)			
Data logging	Bulit-in Printer			
Grids Included	2 (Max 11)	2 (Max 15)	2 (Max 18)	2 (Max 25)
Grid Size (mm)	310x356	410x456	513x556	555x656
Inner Dimensions	400x410x550	500x500x650	600x600x750	700x645x950
Exterior Dimensions	550x620x1280	630x740x1380	750x840x1480	840X880X1680
Packing Dimensions	620X690X1440	700x810x1540	820x910x1640	910X950X1840
Net/Gross Weight	68/108	98/145	130/180	180/220
Power (W)	710	860	950	1350
Standard	Built-in printer, Fluorescent Lamp			
Options	LED Lighting System, UV Lamp, RS-485 interface			
Electricity	220-240V 50/60 Hz			
Approval	CE, ISO			
Temperature				
Temp. Range	Ambient - 20 to 65°C (Min. 4°C)#			
Temp. Accuracy	0.1°C			
Temp. Uniformity	±1.0°C @37°C			
Principle of Sensor	PT100			
Control Mode	Fixed Value & Program			
Cooling System	Auto-Defrosting, Automated, with R134A Refrigerant			

Min. 15°C when Photosynthetic Lighting option is applied.

Option	LED Lighting System		
Part No.	Red & Blue Dual	Warm White	Cool White Mono
Light Type	LED, 50% Red, 50% Blue	LED, 100% Warm White	LED, 100% Cool White
Spectrum	Red: 640-660nm, Blue: 430-450nm	4000k: 400-700nm	6500k: 400-700nm
Light Intensity	Up to 700 µmol/(m2*s)	Up to 650 µmol/(m2*s)	Up to 450 µmol/(m2*s)
Control	Yes, Individually, from 0-100% output	Yes, from 0-100% output	Yes, from 0-100% output
Control Mode	Fixed Value & Programmable		

Ordering Information

Part No.	Description
ZXLP-R1090	90L, Premium Plant Growth Chamber, 4-65℃
ZXLP-R1160	160L, Premium Plant Growth Chamber, 4-65℃
ZXLP-R1270	270L, Premium Plant Growth Chamber, 4-65℃
ZXLP-R1430	430L, Premium Plant Growth Chamber, 4-65℃
P5016	RS-485 Interface
P5022	UV Lighting, 8W, for ZXSD/ZXSP Series
P5048RB-90	LED Lighting Panel, For ZXLP-R1090, Red & Blue
P5048RB-160	LED Lighting Panel, For ZXLP-R1160, Red & Blue
P5048RB-270	LED Lighting Panel, For ZXLP-R1270, Red & Blue
P5048RB-430	LED Lighting Panel, For ZXLP-R1430, Red & Blue
P5048CW-90	LED Lighting Panel, For ZXLP-R1090, Cool White
P5048CW-160	LED Lighting Panel, For ZXLP-R1160, Cool White
P5048CW-270	LED Lighting Panel, For ZXLP-R1270, Cool White
P5048CW-430	LED Lighting Panel, For ZXLP-R1430, Cool White
P5048WW-90	LED Lighting Panel, For ZXLP-R1090, Warm White
P5048WW-160	LED Lighting Panel, For ZXLP-R1160, Warm White
P5048WW-270	LED Lighting Panel, For ZXLP-R1270, Warm White
P5048WW-430	LED Lighting Panel, For ZXLP-R1430, Warm White
P9010	Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S※
P9011	Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S
P9012	Grid Plate for ZXSD-B1270, ZXSD-R1270, S/S