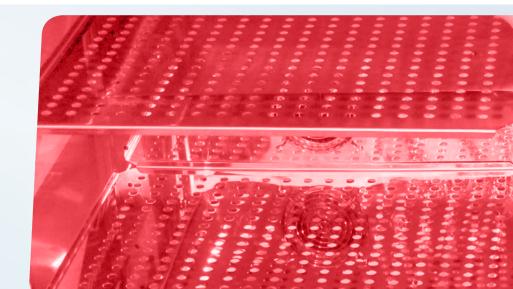


Labwit range of laboratory incubators and drying ovens are made to the highest standard for exceptional quality, trusted for their consistency in delivering optimum performance and reliability in the lab.

Labwit's collection of incubators provide precisely controlled environment with wide variety of sizes and types, which literally are suitable for all purposes in a broad range of applications. The general purpose incubators are designed for general lab use and feature direct heating and water jacket models for optimized temperature uniformity across the inner chambers. The direct heating ${\rm CO_2}$ incubator has been carefully engineered and proven to provide contamination free, reliable and easy-to-use environment conditions to protect the samples and optimize cell growth. Besides these, Labwit also offers incubators with cooling as well as humidity controlling functions, to extend the functionality of our proud product lines.

Moreover, Labwit drying ovens are available in two types, bottom heating and back heating models. Both types are designed for daily lab or industrial work, from drying sterilization applications to complex controlled heating applications.





CO₂ Incubator

LABWIT ZOCR Series CO₂ Incubators have been carefully engineered and proven to provide clean, reliable and easy-to-use environment control to protect your samples and optimize cell growth.

In recent times, CO_2 incubators have become more commonplace in the laboratory for their ability to replicate the growth of mammalian cells and tissues for in vitro fertilization, animal research and the many clinical outcomes and fields of medical research. By controlling three essential variables of constant CO_2 level (%), temperature (°C), and relative humidity (RH%), CO_2 incubator can create a balanced and stable environment for cell to grow and thrive. As a result, a controlled pH level (7.1-7.4), controlled CO_2 level (5%), constant temperature (37°C), and high relative humidity (>95%) are well maintained from there.

Touch Screen Panel Start your complete access and full control from your fingertips



Integrated

Comprehensive information available at your fingertips

User-friendly

Graphic user interface, easy to operate with icons and prompts

Intelligent

Self diagnostic alarm system monitors all functions and parameters and prompts the user in case of errors

1. Decon

Start/ stop Decon Cycle

2. Alarm Indicator

Blinks when alarm occurs.
Alarms (except for sensor failures) can be muted by pressing this icon, and may ring back in 5 minutes if alarm conditions still persist.

3. Door Ajar

Lights when door is opened.



Touch Screen Panel

4. CO, Tank Indicator

Lights when indicated CO₂ tank supply is in use A Tank: Primary B Tank: Secondary

5. Heating Indicator

Lights when heating elements are working

6. Gas Inject Indicator

Lights when CO₂ gas is injected.

7. Enter set menu

8. Clock display

Precise Parameter Controlling System

All-round cares about your cell growth

Direct Heating and Air Jacket System

The chamber design combines direct heating and air jacket elements resulting in efficient thermal isolation of the chamber, rapid temperature recovery and superior protection of samples from ambient temperature fluctuations. Multiple direct heating elements are mounted on each side of the chamber and are controlled independently by the microprocessor to provide outstanding temperature uniformity. One element in the external door and a second within the main unit and adjacent to the perimeter of the glass door, are controlled proportionally to eliminate any of condensation on the glass door.

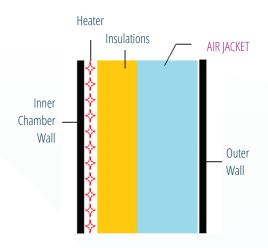
The unique Air Jacket system creates isolations between insulation and ambient, thereby minimizing the impact of ambient temperature fluctuations on the working chamber, and maintaining more stable temperature control.

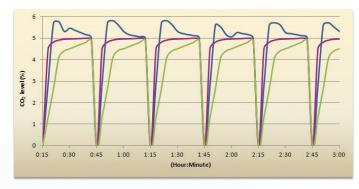
World Class Infrared (IR) CO2 Sensor

LABWIT incorporates a single beam, dual wavelength IR ${\rm CO_2}$ sensor, providing the most accurate measurement of ${\rm CO_2}$ concentrations available to the market. The superior performance and accuracy of the IR sensor are the most noticeable when applied to situations where temperature and humidity fluctuate rapidly, such as when the door is opened frequently.

IR sensor is located out of the chamber; meaning removal is not required when performing the high temperature decontamination cycle.

IR sensor is drift-free, auto-zero automatically adjusts baseline for optimum accuracy, no need to calibrate by the users.





- Company A's Model: Slow recovery (Typical TC Sensor)
- Company B's Model: Overshoot
- LABWIT ZOCR Model: Fast Recovery, non-overshoot (IR Sensor)

Superior Contamination Controlling Features

Maximizing the safety for where your cells will be thriving

In-Line HEPA Filter

Protects cultures by removing potential contamination sources before CO₂ gas is injected into the chamber. In-line filter should be checked and replaced regularly.



Inner Chamber HEPA Filter

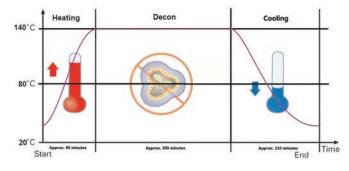
If door openings expose your culture samples to airborne particulates from your room, the inner chamber HEPA filter will dramatically improve air quality (up to 99.97% efficiency in capturing 0.3 micron particles), while maintaining the atmosphere of the still air culture environment avoiding high-speed airflow.

Seamless Chamber & Coved Corners

The entire inner chamber is made of high grade electro polished easy-to-clean stainless steel. All coved corners minimizes the unnecessary chamber surfaces where contaminants can hide.

140°C Decontamination Cycle

The ZOCR Series uses a time-te decontamination. The high temperature decontamination cycle uses 140°C dry heating cycles, effective and maintenance free method to ensure the contaminating agents are eradicated. Your incubator can be fully sterilized and ready for a new application after an 10-hour overnight, maintenance free Decon Cycle.





Safety Features

- ▶ Non-volatile memory guarantees data integrity in the event of power interruption.
- ▶ Over-temperature protections unit: alarms when temperature deviation is detected, and heaters are cut off when the temperature is overshot by 3°C.
- ► CO₂ deviation alarm protects the pH value of the culture media.
- ► CO₂ supply is interrupted upon door opening to avoid unnecessary gas waste.
- ▶ Audio and visual alarm reminds of low supply of CO2 gas.

- ► Alarms provide optimum protections over all sensor failures.
- ▶ Over-current and leakage protection.
- ▶ Password protection ensures the integrity of all programmable system settings.
- ► Lockable outdoor protects biohazard samples from unauthorized access.
- ► CO₂ tank backup system(Optional): integrated gas tank switcher allows the connection of two CO₂ gas supplies. When low gas supply in the primary tank is detected, the controller switches automatically to the secondary supply.

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| ZOCR-1150B | ZOCR-1150B, 150L, Premium DH CO ₂ Incubator, IR Sensor, A+5-60, 0-20% |
|------------|--|
| P4001 | WiseKonect [™] Data Connection Kit |
| P4002 | Right Hinged Door |
| P4003 | Built-in Printer |
| P4004 | Gas Tank Backup Kit |
| P9033 | Perforated Shelf Plate for ZOCR-1150B |

Other Features

▶ Outer Door

Right or Left Hinge Reversible. Heated for preventing condensations.

Lockable outer door protects your samples against unauthorized access, especially when biologically hazardous material is involved.



Shelving

SUS304 electro-polished stainless steel. Anti-tip, easy to dismantle without tools. Perforated, for improving uniformity.



▶ Water Pan

Autoclavable stainless steel water pan heated by controlled base heater to manage humidity and assist humidity recovery.



▶ Humidity Sensor

Ensures continuous monitoring over the humidity level, resolution of display: 1% Passive humidity read-out. Easy to dismantle for high temperature Decon Cycle.



Access Port

Makes validation easy and provide the user convenience for connecting instrumentation. A rubber stopper is included as standard.



▶ Stacking Locator

Corners are pressed for easy locating during stacking.



► Glass Inner Door

Tempered glass door allows observations without interference to the inner chamber environment.



WiseKonect™

A wireless data logging, alarming, monitoring system





LABWIT WiseKonect™ uses 2.4GHz ISM band, the most globally accepted unlicensed portion of the RF spectrum, to connect individual LABWIT equipments to PC for remote alarms control and monitoring over the its performance data.



Compared with RS-232 and RS-485 connections, 2.4GHz is a totally cable free connection, provides high speed, stable and interference free data transmission. Up to over hundreds of equipments may be interfaced to a single PC unit.

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| Model | ZOCR-1150B |
|----------------------------------|---|
| | Temperature |
| Heating Mode | Direct Heat & Air Jacket |
| Control Method | P.I.D Microprocessor |
| Temperature Range (°C) | Ambient+5 to 60 |
| Temperature Uniformity (°C) | ≤±0.2 @37°C |
| Temperature Accuracy (°C) | <u>≤±0.2</u> |
| Ambient Temperature Range (°C) | 10-35 |
| | CO ₂ |
| CO ₂ Control Method | P.I.D Microprocessor |
| CO, Range (% CO2) | 0-20 |
| CO ₂ Accuracy (% CO2) | ≤±0.2 |
| CO ₂ Sensor | IR, Single-Beam, Dual Wavelength, Auto-zeroing |
| | Humidity |
| Humidification Method | Water Pan |
| Humidity Range (RH) | Up to 95% @37°C |
| Humidity Display Resolution (RH) | 1% |
| | Contamination Control |
| Contamination Control Methods | High Temperature 140°C Decon Cycle |
| | 0.3 Micron In-line HEPA Filter for CO ₂ Injection;Inner Chamber HEPA Filter |
| | Controlling system |
| Control Panel | 5.6" TFT Touch Screen |
| Alarms | Low & Over temperature, Low & Over CO ₂ Deviation, Door Ajar, Low Gas Supply, All Sensor Failures, Printer Failure |
| CO2 Tank Backup System | Option, with Low Gas Supply Alarm, Auto Switch |
| Printer | Option, Built-in |
| WiseKonectTM | Option |
| | Capacity |
| Internal Volume (L) | 150 |
| Internal Dimensions (WxDxH)(mm) | 603x488x650 |
| Exterior Dimensions (WxDxH)(mm) | 720x710x930 |
| Packing Dimensions (WxDxH)(mm) | 840x830x1100 |
| Net/Gross Weight (Kg) | 120/140 |
| Door Type | Left/Right Reversible |
| Number of Shelves (Std/Max) | 3/6 |
| Max. Load per Shelf (Kg) | 10 |
| Shelves Size (WxD) (mm) | 530x400 |
| Power (W) | 220/240 Volt 50/60 Hz |
| Electricity | 1200W |
| Approval | CE, ISO |





ZXDP-B2120

DIRECT HEATING Incubators

ZXDP-series direct heating incubators offer an economical incubation method to a variety of micro-organism cultures. As a standard feature, all incubators have a high-tech microprocessor controller that maintains accurate temperature control (PID) of the chamber in the range of ambient \pm 5°C to 65°C. With an accuracy of \pm 0.1°C, a user-friendly sealed control panel allows easy digital setting and fast readout of time and temperature as well as an alarm signal if there is a deviation from set point parameters. The processor of our incubators can store up to 9 programs-18 steps-into a non-volatile memory. Programs can be used for running multiple "ramp and soak" cycles up to 99 times. Of course the incubators can also be used as a constant (one) temperature incubator.

- ► P.I.D. microprocessor ensures the precision of temperature control under both fixed value mode and program mode.
- ► Fully programmable through the keyboard (9 programs/18 steps).
- ► Forced-air circulation provides uniformity of ±0.5°C@37°C.
- ▶ Audible and visible alarm on over temperature.
- ▶ Password protection against unauthorized access to all settings.

- ► Non-volatile memory retains preset parameters after an accidental power interruption.
- ► Large LCD display for easy parameters setting and fast readout.
- ▶ Inner glass door provides complete visibility to the chamber.
- ► Standard 2 grids included

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| Model | ZXDP-B2050 | ZXDP-B2080 | ZXDP- B2120 | ZXDP-B2160 | ZXDP-B2270 |
|------------------------------------|------------------------|------------------|---------------|---------------|---------------|
| Heat Mode | Direct Heat (With Gent | tle Circulation) | | | |
| Volume (L) | 50 | 80 | 120 | 160 | 270 |
| Temperature | Ambient+ 5 to 65°C | | | | |
| Temperature Accuracy | ± 0.1°C. | ± 0.1°C. | ± 0.1°C. | ± 0.1°C. | ± 0.1°C. |
| Temperature Uniformity | ±0.5°C@37°C | ±0.5°C@37°C | ±0.5°C@37°C | ±0.5°C@37°C | ±0.5°C@37°C |
| Alarm | Enabled | Enabled | Enabled | Enabled | Enabled |
| Timer | 0-999 minutes | 0-999 minutes | 0-999 minutes | 0-999 minutes | 0-999 minutes |
| Setting | Digital | Digital | Digital | Digital | Digital |
| Display | LCD | LCD | LCD | LCD | LCD |
| Grid Included | 2 (max 4) | 2 (max 4) | 2 (max 5) | 2 (max 4) | 2 (max 4) |
| Grid Size(mm) (WxD) | 330x345 | 380x395 | 430x445 | 480x495 | 530x595 |
| Distance Between Grids (mm) | 80 | 100 | 110 | 130 | 160 |
| Inner Dimensions (mm) (WxDxH) | 350x350x410 | 400x400x500 | 450x450x600 | 500x500x650 | 600x550x820 |
| Exterior Dimensions (mm) (WxDxH) | 470x520x785 | 520x570x880 | 570x620x980 | 620x670x1030 | 740x740x1280 |
| Packing Dimensions (mm) (WxDxH) | 540x590x945 | 590x640x1040 | 640x690x1140 | 690x740x1190 | 810x810x1440 |
| Net Weight (kg) | 33/57 | 40/73 | 51/85 | 63/94 | 90/130 |
| Power (W) | 200 | 250 | 300 | 380 | 550 |
| Electricity | 220-240V 50/60 Hz | | | | |
| Approval | CE, ISO | | | | |

Order Information

| ZXDP-B2050 | ZXDP-B2050,50L, Direct Heat Incubator, A+5-65°C | P9001 | Grid Plate for ZXDP-B2050, S/S ★ |
|------------|--|-------|----------------------------------|
| ZXDP-B2080 | ZXDP-B2080,80L, Direct Heat Incubator, A+5-65°C | P9002 | Grid Plate for ZXDP-B2080, S/S |
| ZXDP-B2120 | ZXDP-B2120,120L, Direct Heat Incubator, A+5-65°C | P9003 | Grid Plate for ZXDP-B2120, S/S |
| ZXDP-B2160 | ZXDP-B2160,160L, Direct Heat Incubator, A+5-65°C | P9004 | Grid Plate for ZXDP-B2160, S/S |
| ZXDP-B2270 | ZXDP-B2270,270L, Direct Heat Incubator, A+5-65°C | P9005 | Grid Plate for ZXDP-B2270, S/S |

★ S/S: Stainless Steel



JACKET TXGP-B2160

WATER



ZXGP incubators offer an economical incubation method to a variety of micro-organism cultures with high uniformed temperature control. The processor of our incubators can store up to 9 programs-18 steps-into a "non-volatile" memory. Programs can be used for running multiple "ramp and soak" cycles up to 99 times. Of course the incubators can also be used as a constant (one) temperature incubator. With a triple wall construction and large volume of water, ZXGP-series water jacketed incubators provide unsurpassed temperature stability and protection against heat loss. The water jacket technology holds the temperature for extended periods of time, which is critical during power failures. Under test conditions, the temperature initially drops at only 1°C per hour, and just 8.5°C in 10 hours, by contrast, on most direct heating models, which comes with 3.4°C and more than 15°C dropping instead.

| Model | ZXGP-B2050 | ZXGP-B2080 | ZXGP-B2160 | ZXGP-B2270 | | |
|----------------------------------|---------------------------|--|---------------|---------------|--|--|
| Heat Mode | Water Jacket (With Gentle | Water Jacket (With Gentle Circulation) | | | | |
| Volume (L) | 50 | 80 | 160 | 270 | | |
| Temperature | Ambient+ 5 to 65°C | | | | | |
| Temperature Accuracy | ± 0.1°C. | ± 0.1°C. | ± 0.1°C. | ± 0.1°C. | | |
| Temperature Uniformity | ±0.5°C@37°C | ±0.5°C@37°C | ±0.5°C@37°C | ±0.5°C@37°C | | |
| Alarm | Enabled | Enabled | Enabled | Enabled | | |
| Timer | 0-999 minutes | 0-999 minutes | 0-999 minutes | 0-999 minutes | | |
| Setting | Digital | Digital | Digital | Digital | | |
| Display | LCD | LCD | LCD | LCD | | |
| Grid Included | 2 (max 2) | 2 (max 3) | 2 (max 4) | 2 (max 4) | | |
| Grid Size(mm) (WxD) | 330x345 | 380x395 | 480x495 | 580×595 | | |
| Distance Between Grids (mm) | 125 | 110 | 126 | 150 | | |
| Inner Dimensions (mm) (WxDxH) | 350x350x410 | 400x400x500 | 500x500x650 | 600x600x750 | | |
| Exterior Dimensions (mm) (WxDxH) | 510x475x780 | 560x525x870 | 660x625x1020 | 760x725x1120 | | |
| Packing Dimensions (mm) (WxDxH) | 630x595x950 | 680x645x1040 | 780x745x1190 | 880x845x1290 | | |
| Net/Gross Weight (kg) | 35/57 | 45/69 | 78/105 | 115/145 | | |
| Power (W) | 520 | 640 | 1140 | 1740 | | |
| Electricity | 220-240V 50/60 Hz | | | | | |
| Approval | CE, ISO | | | | | |

Order Information

| ZXGP-B2050 | ZXGP-B2050,50L, Water Jacket Incubator, A+5-65°C | P9006 | Grid Plate for ZXGP-B2050, S/S |
|------------|---|-------|--------------------------------|
| ZXGP-B2080 | ZXGP-B2080,80L, Water Jacket Incubator, A+5-65°C | P9007 | Grid Plate for ZXGP-B2080, S/S |
| ZXGP-B2160 | ZXGP-B2160,160L, Water Jacket Incubator, A+5-65°C | P9008 | Grid Plate for ZXGP-B2160, S/S |
| ZXGP-B2270 | ZXGP-B2270,270L, Water Jacket Incubator, A+5-65°C | P9009 | Grid Plate for ZXGP-B2270, S/S |





ZXSD-R1270

PREMIUM BOD Incubators

The premium BOD incubators of the ZXSD-R series from LABWIT are designed to meet a variety of advanced experimental needs, ranging from BOD determination to incubation of micro-organism cultures, preservation of samples, Drosophila incubation and determination of enzymatic activities, to any applications that need incubations at close to ambient temperature or lower. It features a 4.3" TFT touch screen panel, which ensures clear indication as well as easy operations. Each of the four models has a wide temperature range from ambient -18 °C (minimum 4°C) to 65 °C and can be operated at a single user defined temperature, but can also be programmed with up to 9 different temperature segments within a time frame (18 steps). The (cooling) compressor runs continuously and the control is done through a solenoid valve for more precise temperature control if lower than ambient temperatures are required.

- ▶ P.I.D. microprocessor ensures the precision of temperature control under both fixed value mode and programmable mode.
- ► 4.3" TFT touch screen panel displays all parameters, easy operation and readout for all control modes.
- ▶ Three-dimensional airflow system ensures fast response, and high uniformity of $\pm 1.0^{\circ}$ C@37°C.
- ► Sound cooling system with CFC free refrigerant, ozone layer friendly.
- ▶ Automatic defrosting: only minimal ice formation and very low heat discharge into working area occurs the unit can continue operating when defrosting.

- ▶ Real-time electronic timer from 0 to 9999 minutes.
- ▶ Non-volatile memory retains pre-set parameters in case of power interruption.
- ▶ Triple safety protections for samples, incubator and environment.
- ▶ Independent device for over temperature, high current flow and electric leakage.
- ▶ Standard configurations; a double layer tempered glass observe window in outer door, an inner glass door, forced air circulation, a fluorescent lamp, 50 mm test port and 2 grids, built-in printer.
- ▶ Optional UV Lamp, RS-232 interface available.





| Model | ZXSD-R1090 | ZXSD-R1160 | ZXSD-R1270 | ZXSD-R1430 |
|------------------------------------|-----------------------|-------------------------------|------------------------|--------------|
| Volume (L) | 90 | 160 | 270 | 430 |
| Door Type | Outer door with obser | vation window, and heat resis | tance glass inner door | · |
| Temperature Range (°C) | 4 to 65 | | | |
| Temperature Accuracy (°C) | 0.1 | | | |
| Temperature Uniformity (°C) | ±1.0 @37°C | | | |
| Alarm | Enabled | | | |
| Timer (min) | 0-9999 | | | |
| Settings | Digital | | | |
| Display | 4.3" TFT Touch Screen | | | |
| Grids Included | 2 (Max 11) | 2 (Max 15) | 2 (Max 18) | 2 (Max 25) |
| Grid Size (mm) (WxD) | 310x356 | 410x456 | 513x556 | 555x656 |
| Inner Dimensions (mm) (WxDxH) | 400x410x550 | 500x500x650 | 600x600x750 | 700x645x950 |
| Exterior Dimensions (mm) (WxDxH) | 550x620x1280 | 630x740x1380 | 750x840x1480 | 840x880x1680 |
| Packing Dimensions (mm) (WxDxH) | 620x690x1440 | 700x810x1540 | 820x910x1640 | 910x950x1840 |
| Net/Gross Weight (kg) | 68/108 | 98/145 | 153/203 | 180/220 |
| Power (W) | 710 | 860 | 950 | 1350 |
| Electricity | 220-240V 50/60 Hz | | | |
| Approval | CE, ISO | | | |

Order Information

| ZXSD-R1090 | ZXSD-R1090, 90L, Premium Cooled BOD Incubator, 4-65°C |
|------------|---|
| ZXSD-R1160 | ZXSD-R1160,160L, Premium Cooled BOD Incubator, 4-65°C |
| ZXSD-R1270 | ZXSD-R1270,270L, Premium Cooled BOD Incubator, 4-65°C |
| ZXSD-R1430 | ZXSD-R1430,430L, Premium Cooled BOD Incubator, 4-65°C |
| 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 |
| P9013 | Grid Plate for ZXSD-B1430, ZXSD-R1430, S/S |

★ S/S: Stainless Steel





ZXSP-R0270

PREMIUM LOW TEMPERATURE **Incubators**

These premium incubators of the ZXSP-R series features advanced cooling system as well as more engineered structure design which make it possible to cool down as low as -10°C.

Both the interior and exterior are made of robust materials for lifetime operations. The inner chamber is made of high quality #304 stainless steel sheets, with 4 round coved corners. All exposed edges are de-burred to insure no sharp edges. The exterior is cold rolled steel finished with powder coated polyurethane finish, which is resistant to most chemicals and easily cleaned with mild household detergents.

- ► Gas tight and high density insulated outer door without glass window ensures excellent chamber insulation even when running at minus temperatures.
- ▶ P.I.D. microprocessor ensures the precision of temperature 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.
- ► Three-dimensional heating system ensures fast response, and high uniformity of ±1.0°C@37°C.
- ▶ Air tight outer door design ensures optimized insulation, achieving best temperature controlling performance under low temperature setpoint.
- ▶ Optional UV Lamp, RS-232 interface available.

- ▶ Sound cooling system with CFC free refrigerant and automatic defrosting system ensure long term operation at low temperature setpoint without frosting issue.
- ▶ Real-time electronic timer from 0 to 9999 minutes.
- ▶ Non-volatile memory retains pre-set parameters in case of power interruption.
- ► Triple safety protections for samples, incubator and environment.
- ▶ Independent device for over temperature, high current flow and electric leakage.
- ► Standard configurations; forced air circulation, a fluorescent lamp, 50 mm test port and 2 grids, built-in printer.
- ▶ No inner glass door is included.



| Volume (L) | 160 | 270 | 430 | | |
|----------------------------------|--|--------------|--------------|--|--|
| Door Type | Single door with high-density insulation | | | | |
| Temperature Range (°C) | -10 to 65 | | | | |
| Temperature Accuracy (°C) | 0.1 | | | | |
| Temperature Uniformity (°C) | ±1.0 @37°C | | | | |
| Alarm | Enabled | | | | |
| Timer (min) | 0-9999 | | | | |
| Settings | Digital | | | | |
| Display | 4.3" TFT Touch Screen | | | | |
| Grid size (mm) (WxD) | 380x456 | 477x556 | 513x656 | | |
| Grids No. | 2 (Max.15) | 2 (Max. 18) | 2 (Max. 25) | | |
| Inner dimensions (mm) (WxDxH) | 500x500x650 | 600x600x750 | 700x645x950 | | |
| Exterior dimensions (mm) (WxDxH) | 650x680x1380 | 750x780x1480 | 850x820x1680 | | |
| Packing dimensions (mm) (WxDxH) | 700x810x1540 | 820x850x1640 | 920x890x1840 | | |
| Net/Gross Weight (kg) | 98/145 | 153/203 | 180/220 | | |
| Power (W) | 860 | 950 | 1350 | | |
| Electricity | 220/240 Volt 50/60 Hz | | | | |
| Approval | CE, ISO | | | | |

ZXSP-R0270

ZXSP-R0430

Model ZXSP-R0160

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| ZXSP-R0160 ZXSP-R0160,160L, Premium Low Temperature BOD Incubator, -10-65 | |
|--|--|
| ZXSP-R0270 | ZXSP-R0270,270L, Premium Low Temperature BOD Incubator, -10-65°C |
| ZXSP-R0430 | ZXSP-R0430,430L, Premium Low Temperature BOD Incubator, -10-65°C |
| P9030 | Grid Plate for ZXSP-R0160, S/S |
| P9031 | Grid Plate for ZXSP-R0270, S/S |
| P9032 | Grid Plate for ZXSP-R0430, S/S |

★ S/S: Stainless Steel







ZXSD-B1160

ECONOMIC BOD Incubators

The BOD incubators of the ZXSD-series from LABWIT are designed to meet a variety of advanced experimental needs, ranging from BOD determination to incubation of micro-organism cultures, preservation of samples, Drosophila incubation and determination of enzymatic activities. All these applications require precise and constant temperature control. Each of the four models has a wide temperature range from ambient -18 °C (minimum 4°C) to 65 °C and can be operated at a single user defined temperature, but can also be programmed with up to 9 different temperature segments within a time frame. (18 steps). The (cooling) compressor runs continuously and the control are done through a solenoid valve for more precise temperature control if lower than ambient temperatures are required.

ZXSD-series BOD incubators also feature a back-up program in case of power failures, the stored parameters remain in the memory of the microprocessor. Your experiment therefore resumes under the same conditions even when interrupted by an interruption of power.

- ► P.I.D. microprocessor ensures the precision of temperature control under both fixed value mode and program mode.
- ► Large blue LCD display for temperature diagram, easy readout for program control.
- ► Three-dimensional heating system ensures fast response, and high uniformity of ±1.0°C@37°C.
- ▶ Sound cooling system with CFC free refrigerant.
- ▶ Real-time electronic timer from 0 to 999 minutes.
- ▶ Password protection of all parameters against unauthorized access.

- ▶ Non-volatile memory retains pre-set parameters in case of power interruption.
- ▶ Triple safety protections for samples, incubator and environment.
- ▶ Independent device for over temperature, high current flow and electric leakage.
- ▶ Standard configurations; a double layer tempered glass observe window in outer door, an inner glass door, forced air circulation, a fluorescent lamp, 50 mm test port and 2 grids.
- ▶ Optional built-in printer, UV Lamp, RS-232 interface available.





| Model | ZXSD-B1090 | ZXSD-B1160 | ZXSD-B1270 | ZXSD-B1430 |
|----------------------------------|---------------------|--------------------------|-----------------------------|--------------|
| Volume (L) | 90 | 160 | 270 | 430 |
| Door Type | Outer door with obs | ervation window, and hea | t resistance glass inner do | or |
| Temperature Range (°C) | 4 to 65 | | | |
| Temperature Accuracy (°C) | 0.1 | | | |
| Temperature Uniformity (°C) | ±1.0 @ 37°C | | | |
| Alarm | Enabled | | | |
| Timer (min) | 0-999 | | | |
| Settings | Digital | | | |
| Display | LCD | | | |
| Grids Included | 2 (Max 11) | 2 (Max 15) | 2 (Max 18) | 2 (Max 25) |
| Grid Size (mm) (WxD) | 310x356 | 410x456 | 513x556 | 555x656 |
| Inner Dimensions (mm) (WxDxH) | 400x410x550 | 500x500x650 | 600x600x750 | 700x645x950 |
| Exterior Dimensions (mm) (WxDxH) | 550x555x1280 | 630x740x1380 | 750x840x1480 | 840x880x1680 |
| Packing Dimensions (mm) (WxDxH) | 620x625x1440 | 700x810x1540 | 820x810x1640 | 910x950x1840 |
| Net/Gross Weight (kg) | 68/108 | 98/145 | 153/203 | 180/220 |
| Power (W) | 710 | 860 | 950 | 1350 |
| Electricity | 220-240V 50/60 Hz | | | |
| Approval | CE, ISO | | | |

| ZXSD-B1090ZXSD-B1090,90L, Economic Cooled BOD Incubator, 4-65°CZXSD-B1160ZXSD-B1160,160L, Economic Cooled BOD Incubator, 4-65°CZXSD-B1270ZXSD-B1270,270L, Economic Cooled BOD Incubator, 4-65°CZXSD-B1430ZXSD-B1430,430L, Economic Cooled BOD Incubator, 4-65°CP9010Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S ★P9011Grid Plate for ZXSD-B1160, ZXSD-R1160, S/SP9012Grid Plate for ZXSD-B1270, ZXSD-R1270, S/S | | Order Information |
|--|------------|--|
| ZXSD-B1270 ZXSD-B1270,270L, Economic Cooled BOD Incubator, 4-65°C ZXSD-B1430 ZXSD-B1430,430L, Economic Cooled BOD Incubator, 4-65°C P9010 Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S ** P9011 Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S | ZXSD-B1090 | ZXSD-B1090,90L, Economic Cooled BOD Incubator, 4-65°C |
| ZXSD-B1430 ZXSD-B1430,430L, Economic Cooled BOD Incubator, 4-65°C P9010 Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S ** P9011 Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S | ZXSD-B1160 | ZXSD-B1160,160L, Economic Cooled BOD Incubator, 4-65°C |
| P9010 Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S * P9011 Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S | ZXSD-B1270 | ZXSD-B1270,270L, Economic Cooled BOD Incubator, 4-65°C |
| P9011 Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S | ZXSD-B1430 | ZXSD-B1430,430L, Economic Cooled BOD Incubator, 4-65°C |
| | P9010 | Grid Plate for ZXSD-B1090, ZXSD-R1090, S/S ★ |
| P9012 Grid Plate for ZXSD-B1270, ZXSD-R1270, S/S | P9011 | Grid Plate for ZXSD-B1160, ZXSD-R1160, S/S |
| | P9012 | Grid Plate for ZXSD-B1270, ZXSD-R1270, S/S |
| P9013 Grid Plate for ZXSD-B1430, ZXSD-R1430, S/S | P9013 | Grid Plate for ZXSD-B1430, ZXSD-R1430, S/S |





HUMIDITY Incubators



ZXMP-A1150

Like all LABWIT equipment, the humidity incubators have been designed to provide high quality standards of performance with matching microprocessor technology, precise temperature control and humidity control system combining state-of-the-art technology with years of design, quality and manufacturing experience. The ZXMP-series humidity incubators are specialized in a variety of critical experiments, such as analysis of water, BOD tests, incubation of tissue cell, germs and other micro-organism, and so on. To achieve this, the LABWIT control electronics is in place to service the precise control requirements of the chambers environment, providing optimum programmable conditions for culture growth.

Each model has a wide temperature range from 4 to 65 °C, with relative humidity control from 40 to 98%RH, which can be operated at a single user defined temperature and relative humidity, but can also be programmed with up to 9 different temperature/ humidity segments within a time frame. (18 steps)

- ▶ P.I.D. microprocessor ensures the precision of temperature and humidity control under both fixed value mode and program mode.
- ► The microprocessor is "user friendly" with status indicators, LCD display of control parameters, to permit efficient operator entry of data.
- ▶ The chamber is humidified by injecting heated water vapour from a reservoir located outside of the chamber. Maintenance of the water tank can be easily performed from the side and back. The water level in the tank can be checked by looking through the central viewing window.
- ► Tempered inner glass window provides a clear view of samples in the chamber.
- ► Three-dimensional heating system ensures fast response, and high uniformity of ±1.0°C@37°C.

- ▶ Sound cooling system with CFC free refrigerant and automatic defrosting system.
- ▶ Real-time electronic timer from 0 to 999 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.
- ▶ Independent device for over temperature, high current flow and electric leakage.
- ► Standard 2 grids included, optional built-in printer, UV Lamp, RS-232 interface available.



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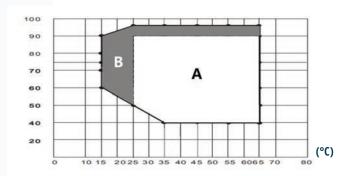
| Model | ZXMP-A1150 | ZXMP-A1230 | ZXMP-A1430 |
|----------------------------------|-------------------|--------------|--------------|
| Volume (L) | 150 | 270 | 430 |
| Temperature Range (°C) | 4 to 65 | | |
| Temperature Accuracy (°C) | 0.1 | | |
| Temperature Uniformity (°C) | ±1.0 @37°C | | |
| Humidity Range (%RH) | 40-98 | | |
| Humidity Accuracy (%RH) | 0.1 | | |
| Humidity Uniformity (%RH) | ±5 | | |
| Alarm | Enabled | | |
| Timer (min) | 0-999 | | |
| Settings | Digital | | |
| Display | LCD | | |
| Grids Included | 2 (Max 13) | 2 (Max 15) | 2 (Max 23) |
| Grid size (mm) (WxD) | 336x456 | 426x556 | 528x658 |
| Inner dimensions (mm) (WxDxH) | 500x460x650 | 600x500x700 | 700x650x950 |
| Exterior dimensions (mm) (WxDxH) | 640x700x1350 | 740x790x1400 | 850x890x1650 |
| Packing dimensions (mm) (WxDxH) | 710x770x1510 | 810x860x1560 | 920x960x1810 |
| Net/Gross Weight (kg) | 105/145 | 130/180 | 175/220 |
| Power (W) | 1500 | 1600 | 2500 |
| Electricity | 220-240V 50/60 Hz | | |
| Approval | CE, ISO | | |

Order Information

| ZXMP-A1150 | ZXMP-A1150,150L, Humidity Incubator, 4-65°C, 40-98% |
|------------|--|
| ZXMP-A1230 | ZXMP-A1230,230L, Humidity Incubator, 4-65°C, 40-98% |
| ZXMP-A1430 | ZXMP-A1430, 430L, Humidity Incubator, 4-65°C, 40-98% |
| P9014 | Grid Plate for ZXMP-A1150, S/S * |
| P9015 | Grid Plate for ZXMP-A1230, S/S |
| P9016 | Grid Plate for ZXMP-A1430, S/S |

★ S/S: Stainless Steel

Temperature & Humidity Control Range (%RH)



A: Guaranteed working range

B: Recommended Time-limited operation (max. 24 hours)