



DIGITAL  
WATER BATH

## JSWB-Series

### DIGITAL HEATED WATER BATH

amb. +5 °C ~ 99 °C  
6, 11, 22, 30 LITER

JSWB-T Series Digital Water Bath to provides constant temperature environment with heated water.

Suitable for biotechnology, chemistry, medical, environmental and general laboratory applications of temperature range from ambient +5 °C to 99 °C



JSWB-22T Digital Water Bath, 22 liter



JSWB-11T Digital Water Bath, 11 liter

## # Features

### Performance

Temperature Range : amb. +5 °C to 99 °C

Temperature Accuracy : within +/- 0.2 °C

Temperature Uniformity : within +/- 0.8 °C

Corrosion resistant Stainless Steel 304 sheath

immersion heater directly heating water in the bath to reach set temperature quickly.

Perforated heater cover helps convection of heated water circulation throughout bath to maintain thermal uniformity of the bath

### Construction

Durable epoxy powder coated metallic casing

Corrosion resistant Seamless Electro-Polished

Stainless Steel 304 bath

Corrosion resistant Stainless Steel 304

sheath immersion heater

Corrosion resistant Stainless Steel 304 flat lid

Perforated heater cover (bottom plate)

### Convenience

Easy to clean Electro-Polished seamless SS 304 Bath

Drain for easy emptying the bath fluid

(JSWB-22T, JSWB-30T only)

Supplied with stainless steel Flat Lid to help reduce heat losses and evaporation

### Safety

DUAL OVER TEMPERATURE CUT-OFF BY CONTROLLER  
AND INDEPENDENT THERMOSTAT

HIGH TEMPERATURE CUT-OFF AND AUDIO VISUAL ALARM

LOW TEMPERATURE CUT-OFF AND AUDIO VISUAL ALARM

PT SENSOR SHORT OR DISCONNECTION AUDIO VISUAL ALARM

OVER CURRENT CUT-OFF : Fuse

# 3-ZONE PID Algorithm

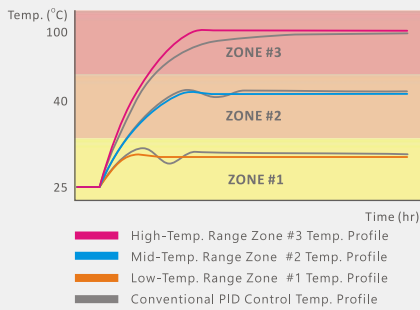
## 3-Point Calibration

### 1-Point Offset

#### Temperature Control

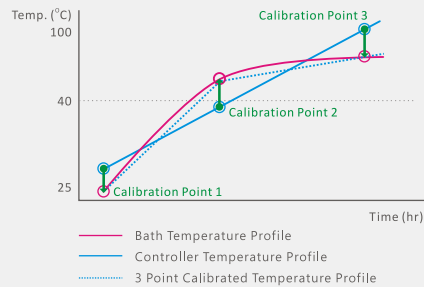
- Digital Microprocessor PID Controller
- High-fidelity clear back light LCD displays complete setting and operating condition at a glance
- UV Coated Polycarbonate Touch Panel
- Easy-to-use Encoder Type Jog Dial for quick and convenient setting of temperature and timer
- 0.1 °C Control resolution
- Turn-On and Turn-Off Timer up to 99 hour 59 min.
- Temperature and Timer memory function in frequent use
- 3-Zone PID Algorithm
- 3-Point Calibration
- 1-Point Offset Calibration
- Power Outage and Restore Function
- Class A Pt-100 Ohm Sensor

#### 3-ZONE PID Algorithm



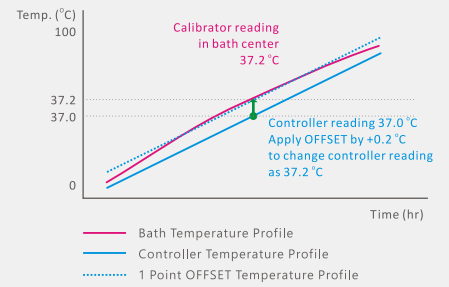
Complete temperature range is divided into three zones (LOW/MIDDLE/HIGH) and each ZONE has its individual PID algorithm to provide precise and superior temperature control characteristic of whole temperature range.

#### 3-Point Calibration



An excellent calibration tool to calibrate bath at THREE DIFFERENT TEMPERATURE POINTS to adjust multiple temperature bias to increase temperature accuracy of WHOLE TEMPERATURE RANGE.

#### 1-Point Offset



Provides simple and easy calibration tool to calibrate chamber at ONE SPECIFIC TEMPERATURE POINT of frequent use.



# # Specifications

Model	JSWB-06T	JSWB-11T	JSWB-22T	JSWB-30T
<b>Dimension Data</b>				
Bath Volume	6 Liters	11 Liters	22 Liters	30 Liters
Inner Dims. (WxDxH) mm	300 x 155 x 150	300 x 240 x 150	500 x 300 x 150	500 x 300 x 200
Usable Dims. (WxH) mm	300 x 155 x 110	300 x 240 x 110	500 x 300 x 110	500 x 300 x 160
Outer Dims. (WxDxH) mm including	340 x 200 x 270	340 x 285 x 270	545 x 345 x 270	545 x 345 x 320
	1 ea x Heater Cover, 1 ea x Stainless Steel 304 Flat Lid			
<b>Performance Data</b>				
Heating System	Direct Heating by Immersion Heating Element			
Temperature Range	ambient +5 °C to 99.0 °C, 0.1 °C resolution			
Temperature Accuracy at 37.0 °C	+/- 0.2 °C	+/- 0.2 °C	+/- 0.2 °C	+/- 0.2 °C
Temperature Uniformity at 37.0 °C	+/- 0.8 °C	+/- 0.8 °C	+/- 0.8 °C	+/- 1.0 °C
<b>Controller</b>				
Type	Digital Microprocessor PID Temp. Controller with Capacitive Touch Button and Jog Dial			
Display	Full Size Digital Back Light Graphic LCD Display			
Control Logic	3 Zone PID Control			
Calibration	1 Point Temperature Offset 3 Point Temperature Calibration			
Turn-Off Timer	Max. 99 hr 59 min by 1 min resolution			
Turn-On Timer	Max. 99 hr 59 min by 1 min resolution			
Sensor	Class A Pt-100 Ohm Sensor			
Power Restoration	Power and Timer Restoration Function in case of power outage			
<b>Material Data</b>				
Body	Epoxy Powder Coated Steel			
Chamber	Seamless Stainless Steel 304 (AISI304)			
Heating Element	Stainless Steel 304 (AISI304)			
<b>Safety Data</b>				
Safety Device	Over Temperature / Over Current Protection Audio Visual Alarm			
<b>Electrical Data</b>				
Power Requirement	230 +/- 10% VAC   50/60 Hz   1 Phase			
Power Consumption	600 W 2.7 amp	1.0 kW 4.6 amp	1.5 kW 6.8 amp	2.0 kW 9.2 amp
Plug Configuration	CEE 7/7 Schuko or BS 1363			
<b>Usable Condition</b>				
Temp. & Humidity	5 °C - 40 °C, 80% RH Max.			



**JS Research Inc.**

Gongju-City, KOREA  
 info@jsresearch.co.kr  
 www.jsr.kr

## # Ordering Information

### Art. Number

### Descriptions

JSWB-06T	Digital Heated Water Bath 6 Liter	230 VAC 1 ph 50/60Hz
JSWB-11T	Digital Heated Water Bath 11 Liter	230 VAC 1 ph 50/60Hz
JSWB-22T	Digital Heated Water Bath 22 Liter	230 VAC 1 ph 50/60Hz
JSWB-30T	Digital Heated Water Bath 30 Liter	230 VAC 1 ph 50/60Hz

## JSWB-Series

### DIGITAL HEATED WATER BATH

amb. +5 °C ~ 99 °C

### Accessories

#### Gabled Lid, Stainless Steel 304

PHL-WG06	Gabled Lid for JSWB-06T
PHL-WG11	Gabled Lid for JSWB-11T
PHL-WG22	Gabled Lid for JSWB-22T
PHL-WG30	Gabled Lid for JSWB-30T



### Accessories

#### Concentric Ring Cover, Stainless Steel 304, 4-Rings Dia. 30, 60, 90, 100 mm

PHL-WR06	1 x 2 Holes, Concentric Ring Cover, 4-Rings for JSWB-06T
PHL-WR11	1 x 2 Holes, Concentric Ring Cover, 4-Rings for JSWB-11T
PHL-WR22	2 x 3 Holes, Concentric Ring Cover, 4-Rings for JSWB-22T
PHL-WR30	2 x 3 Holes, Concentric Ring Cover, 4-Rings for JSWB-30T



DISTRIBUTOR

# JSR

**JS Research Inc.**

69, Gumsanggogae-Gil,  
Gongju-City, KOREA

Phone: +82-41-856-3677

Fax: +82-41-856-3679

info@jsresearch.co.kr

www.jsr.kr