

## COMMODITY DESCRIPTION

H.S. No	Item No	Description	Unit	Quantity
		Two Chamber Shaking Incubator	set	1

A. Model : JSSI-202CL

B. Product Description : Shaking Incubator

C. Manufacturer / Origin : JS Research Inc. / Korea

D. Application :

JSSI-202 Series Shaking Incubator has two independent temperature controlled chambers with shaker for big volume tissue culture applications at different temperature and shaking speed.

Front loading door system allow easy sample loading and unloading.

E. Photo



JSSI-202C(L) Two Chamber Shaking Incubator

## **F. Feature**

### **JSC-7S Integrated Digital PID Controller**

- ✓ Temperature control with  $\pm 0.1$  °C
- ✓ Shaking speed control within  $\pm 1$  rpm
- ✓ Temperature and shaking can be controlled together or independently with timer
- ✓ Automatic STOP timer Max. 99min 59sec / 99hr 59min / 99day 23hr
- ✓ Dual digital LED displays TEMP, RPM and remaining TIME
- ✓ Temperature calibration
- ✓ Shaking speed calibration
- ✓ Slow Start and Stop Control
- ✓ Auto-tuning function
- ✓ Class A Pt-100  $\Omega$  sensor
- ✓ Power back-up function when power failure.
- ✓ Programmable Photoperiodic Day and Night simulation Light Control with 4 x 36 Watt Fluorescent Lamps and 24 hr timer

### **Construction**

- ✓ Durable epoxy powder coated metallic casing
- ✓ Corrosion resistant Stainless Steel 304 chamber
- ✓ Durable Stainless Steel 304 Sheath Heater and Copper-Aluminum fin evaporator
- ✓ Front loading door with magnetic packing with glass window

### **Performance**

- ✓ Two independent temperature controlled chamber with shaking platform allows conducting two different culture conditions at the same time.
- ✓ Forced circulation for excellent thermal uniformity within  $\pm 0.2$  °C
- ✓ Separate heating and cooling compartment prevents contamination and maintenance free
- ✓ Cooling system with hermetically sealed compressor
- ✓ Durable shaking mechanism with powerful AC motor supports orbital or reciprocal shaking motion
- ✓ Programmable Lighting System with 24 hour timer for photosynthetic culture

### **Convenience**

- ✓ Door with silicone packing and compression door lock.
- ✓ Double layer glass window, lighting in chamber for easy observation during cultivation
- ✓ Door switch to cut-off shaking motion when put in and out sample
- ✓ Auto-defrost system, user settable interval and time
- ✓ Caster and height adjustable level feet for easy transport, balancing and anti-vibration
- ✓ Various choice of shaking platforms

## Safety

- ✓ DUAL OVER TEMP. CUT-OFF  
Digital system cut-off heater and AUDIO VISUAL ALARM in case +2 °C above set temperature  
Analog system cut-off heater 10% above set temp.
- ✓ MAX TEMP CUT-OFF heater and AUDIO VISUAL ALARM when +1 °C above maximum limit
- ✓ OVER COOLING. CUT-OFF  
Digital system automatically cut-off compressor in case -3 °C below set temperature
- ✓ OVER SPEED CUT-OFF  
Digital system automatically cut-off motor in case +10 rpm above set rpm.
- ✓ SENSOR DISCONNECTION ALARM
- ✓ Motor failure ALARM
- ✓ Shaking motion automatically stops when door opened
- ✓ OVER CURRENT CUT-OFF : Electric Leakage Breaker

## G. Specifications

Chamber Volume (Capacity)	2 Chambers x 324 Liters
Inner Dims. (W x D x H)	750 x 720 x 600 mm
Outer Dims. (W x D x H)	1295 x 845 x 1750 mm
Platform Dims. (W x D)	700 x 650 mm
Heating	Forced Air Convection
Cooling	CFC Free Air Cooled Compressor
Temp. Range	+10°C ~ +70°C
Accuracy	±0.5°C at +25°C
Uniformity	±2.0°C at +25°C
Shaking Mode	Orbital Reciprocal with optional adaptor
Shaking speed range	20 ~ 350 rpm
Shaking Stroke	20 mm
Shaking speed accuracy	±1 rpm
Work Light	4 x 36 Watt Fluorescent Lamp
Control	Integrated Digital PID microprocessor control system Digital display of PV and SV for temperature, rpm and time Timer : 99min 59sec / 99hr 59min / continuous time scale selectable
Sensor	Class A PT-100 Ω Sensor

Safety	Over-Temperature Cut-Off Over-Speed Cut-Off Over Current Cut-Off
Material	Body : Epoxy Powder Coated Steel, 1.0 mm thickness Chamber : Stainless Steel 304, 0.8 mm thickness Glass Window : Double Layer Tempered Safety, 5 mm thickness
Electrical Requirement	220 ± 10% VAC, 50/60Hz, 1-Phase
Heater Capacity	2 x 1.2 kW
Power Rating	20.0 amps
Plug Configuration	CEE 7/7 Schuko or BS 1363
Net Weight	200 kg
Shipping Weight	250 kg
Shipping Dims. (W x D x H)	1450 x 1000 x 1950 mm, Wooden crating

#### H. Standard Accessories

Instruction Manual : 1 EA  
Warranty Card : 1 EA

#### I. Options & Accessories

Art No.	Descriptions
PHF-P11	Adaptor Kit for Reciprocal Motion
OHC-106	24 Hour Timer Photoperiodic Light Control
PHF-U70	Universal Spring Rack W690 x D650 mm Flask loading capacity (approx. 42 x 100ml, 25 x 250ml, 19 x 500ml, 15 x 1000ml, 8 x 2000ml)
PHF-P70	Universal Flask Holder Platform W700 x D650 mm Flask loading capacity (approx. 41 x 100ml, 25 x 250ml, 25 x 500ml, 16 x 1000ml, 9 x 2000ml, 9 x 3000ml, 5 x 5000ml)
PHF-P71	Dedicated Flask Holder Platform W700 x D650 mm including 72 ea x 50 ~ 100 ml polycarbonate flasks holder
PHF-P72	Dedicated Flask Holder Platform W700 x D650 mm including 42 ea x 200 ~ 300 ml polycarbonate flasks holder

**PHF-P73** Dedicated Flask Holder Platform W700 x D650 mm  
including 25 ea x 500 - 1000 ml polycarbonate flasks holder

**PHF-M70** Non-Slip Rubber Mat W700 x D650 mm

**PHF-P01** Polycarbonate Flask Holder 50 - 100 ml Size Adjustable

**PHF-P02** Polycarbonate Flask Holder 200 - 300 ml Size Adjustable

**PHF-P03** Polycarbonate Flask Holder 500 - 1000 ml Size Adjustable

**PHF-S01** Stainless Steel Flask Holder 100 ml

**PHF-S02** Stainless Steel Flask Holder 250 ml

**PHF-S03** Stainless Steel Flask Holder 500 ml

**PHF-S04** Stainless Steel Flask Holder 1000 ml

**PHF-S05** Stainless Steel Flask Holder 2000 ml

**PHF-S06** Stainless Steel Flask Holder 3000 ml

**PHF-S07** Stainless Steel Flask Holder 5000 ml

**PHF-T01** Test Tube Holder 8 mm Dia. for 80 test tubes

**PHF-T01** Test Tube Holder 10 mm Dia. for 80 test tubes

**PHF-T01** Test Tube Holder 12 mm Dia. for 54 test tubes

**PHF-T01** Test Tube Holder 14 mm Dia. for 54 test tubes

**PHF-T01** Test Tube Holder 16 mm Dia. for 30 test tubes

**PHF-T01** Test Tube Holder 25 mm Dia. for 15 test tubes

**PHF-T01** Test Tube Holder 35 mm Dia. for 8 test tubes

## **J. Warranty**

1 Year full coverage warranty