

COMMODITY DESCRIPTION

| H.S. No | Item No | Description | Unit | Quantity |
|---------|---------|--------------------------------------|------------|----------|
| | | Multi-Stack Shaking Incubator | set | 1 |

A. Model : JSSI-4CM

B. Product Description : Multi Stack Shaking Incubator

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

D. Application :

JSSI-CM Series Shaking Incubator provides multiple shaking platforms in a temperature controlled chamber for big volume tissue culture applications. Ideal for any shaking application requiring controlled temperature and speed for microbiology, cell biology, cell culture, tissue culture, biochemistry, molecular biology, environmental engineering, soil testing field temperature range from + 10 °C to +70 °C and shaking speed from 20 ~ 350 rpm.

E. Photo



JSSI-4CM Multi-Stack Shaking Incubator

F. Feature

JSC-1D Digital PID Temperature Controller

- ✓ ± 0.1 °C Digital PID Controller with LED Display
- ✓ Automatic START/STOP timer
- ✓ Adjustable timer scale 99min 59sec / 99hr 59min / 99day 23hr or continuous operation
- ✓ Temperature calibration
- ✓ Auto-tuning function
- ✓ Class A Pt-100 Ω sensor

JSC-TACHO Digital Shaking Controller

- ✓ Digital feedback RPM controller with automatic STOP timer, max. 99min 59sec / 99hr 59min / continuous
- ✓ 4 digit dual digital LED displays RPM and TIME
- ✓ Inbuilt rpm calibration function
- ✓ Adjustable smooth start and stop motion

Construction

- ✓ Durable epoxy powder coated metallic casing
- ✓ Corrosion resistant Stainless Steel 304 chamber
- ✓ Durable Stainless Steel 304 Sheath Heater and Copper-Aluminum fin evaporator
- ✓ Door with magnetic packing, double layer glass window
- ✓ 4 ea x caster and level foot for self balancing and anti-vibration

Performance

- ✓ Four independently controlled shaking platform in a temperature controlled chamber enables large volume of culture under same condition for time saving and consistent production result.
- ✓ Each shaking platform can be operated independently under different speed and time
- ✓ Forced circulation for excellent thermal uniformity within ± 0.5 °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

Convenience

- ✓ Door with silicone packing and compression door lock. Glass window on each platform, 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) | 1180 Liters |
| No. of Shaking Platform | 4 Shaking Platforms |
| Inner Dims. (W x D x H) | 850 x 720 x 1925 mm |
| Outer Dims. (W x D x H) | 1590 x 910 x 2255 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 | ±3.0°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 |
| Control | Digital PID microprocessor temperature control Digital Feedback Shaking Control Timer : 99min 59sec / 99hr 59min / 99day 23hr / continuous |
| 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 | 2.0 kW |
| Power Rating | 15.0 amps |
| Plug Configuration | CEE 7/7 Schuko or BS 1363 |
| Net Weight | 410 kg |
| Shipping Weight | 510 kg |
| Shipping Dims. (W x D x H) | 1720 x 1030 x 2390 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 |
| 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