

## COMMODITY DESCRIPTION

| H.S. Code | Item No | Description                 | Unit | Quantity |
|-----------|---------|-----------------------------|------|----------|
|           |         | Drug Stability Test Chamber | SET  | 1        |

A. Model Name : JSDS-420C

B. Product Description : Drug Stability Test Chamber

C. Manufacturer / Origin : JS Research Inc. / Rep. of KOREA

D. Application :

JSDS-Series Temperature and Humidity Drug Stability Chamber designed for Drug Stability Test for pharmaceutical industry meets the requirement of ICH Guideline Q1A (Stability Test)

E. Photo



JSDS-420C Drug Stability Test Chamber

## F. Feature

### Basic Controller (JSC-4CP Programmable Controller)

- ✓ High precision Digital PID Microprocessor controls temperature, humidity, lighting and CO<sub>2</sub> concentration in one integrated unit with easy to use 4-line back-light LCD display interface
- ✓ Programmable operation capability of various climatic conditions of temperature and humidity with time duration up to 11 Segments 999 cycles or unlimited repeating operation
- ✓ Class A Pt-100 Ω temperature sensor
- ✓ Precision electronic humidity sensor

### Optional Controller (JSC-2500 Touch Screen Controller)

- ✓ 5.7" TFT-LCD Touch Screen Programmable PID Controller
- ✓ 120 Patterns memory 1200 Segments 999 times repeatable
- ✓ RS-232C or RS-485 Multi-Drop serial communication up to 31 instruments and PC software
- ✓ SD memory card save parameter, patterns and trend data logging
- ✓ Maximum 9 zone PID group for different temperature and humidity range for better control accuracy
- ✓ Temperature calibration and auto-tuning function
- ✓ Class A Pt-100 Ω sensor and electronic humidity sensor

### Optional Controller (JSC-950 Touch Screen Controller)

- ✓ 5.6" TFT-LCD Touch Screen Programmable PID Controller
- ✓ 120 Patterns memory 1200 Segments 999 times repeatable
- ✓ RS-232C or RS-485 Multi-Drop serial communication up to 31 instruments and PC software
- ✓ 64 MB Internal memory save parameter, patterns and trend data logging
- ✓ Maximum 9 zone PID group for different temperature and humidity range for better control accuracy
- ✓ Temperature calibration and auto-tuning function
- ✓ Class A Pt-100 Ω sensor and electronic humidity sensor

### Construction

- ✓ Durable epoxy powder coated metallic casing
- ✓ Corrosion resistant Stainless Steel 304 chamber
- ✓ Durable Stainless Steel 304 Sheath Heater and Copper-Aluminum fin evaporator
- ✓ Removable and height adjustable shelf
- ✓ Built-in humidifier and automatic water supply
- ✓ Double layer vacuum tempered safety glass side wall on light bank

- ✓ Tempered Safety inner glass door

#### Performance

- ✓ Forced air circulation of controlled temperature and humidity to achieve excellent thermal uniformity
- ✓ Durable Stainless Steel 304 Sheath Heater and copper-aluminum finned evaporator
- ✓ Temperature control within  $\pm 0.1$  °C resolution
- ✓ Humidity control within  $\pm 1.0\%$  RH resolution
- ✓ Separate heating and cooling compartment prevents contamination and maintenance free
- ✓ Cooling system with hermetically sealed compressor

#### Convenience

- ✓ Outer door with self adhesive magnetic packing
- ✓ Inner glass door with air tight gasket for easy observation of sample during experiment.
- ✓ Removable and height adjustable shelf by 25mm spacing
- ✓ Easy to access Light Bank System for convenient maintenance
- ✓ Corrosion resistant Stainless Steel 304 (ASTM 304) chamber
- ✓ Auto-defrost system, user settable interval and time
- ✓ Built-in casters for easy transport

#### 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
- ✓ SENSOR DISCONNECTION ALARM
- ✓ LOW WATER LEVEL ALARM AND CUT-OFF
- ✓ HUMIDIFIER DRY-BURN PROTECTION
- ✓ OVER CURRENT CUT-OFF : Electric Leakage Breaker

#### G. Specifications

|                           |                                |
|---------------------------|--------------------------------|
| Chamber Volume (Capacity) | 432 Liters                     |
| Inner Dims. (W x D x H)   | 600 x 600 x 1200 mm            |
| Outer Dims. (W x D x H)   | 790 x 935 x 1985 mm            |
| No. of Shelves included   | 3 EA                           |
| No. of Shelf position     | 35 EA by 25 mm spacing         |
| Heating                   | Forced Air Convection          |
| Cooling                   | CFC Free air cooled compressor |

|                        |  |
|------------------------|--|
| Control                | Program Mode 1 Patterns Memory 11 Segments<br>Manual Mode Fixed Temp. operation with timer |
| Temp. Range            | +10°C ~ +70°C  |
| Accuracy               | ±0.3°C at +20°C, 60% RH  |
| Uniformity             | ±1.0°C at +20°C, 60% RH  |
| Sensor                 | Class A PT-100 Ω Sensor  |
| Humidity Range         | 30% ~ 85% RH   |
| Accuracy               | ±3.0% at 60% RH  |
| Uniformity             | ±6.0% at 60% RH  |
| Sensor                 | Electronic Humiral Sensor  |
| Lamp configuration     | 3 ea x 36 Watt fluorescent tube  |
| Safety                 | Over-Temperature Cut-Off<br>Low water level Cut-Off<br>Over Current Cut-Off                |
| Material               | Body : Epoxy Powder Coated Steel<br>Chamber : Stainless Steel 304                          |
| Electrical Requirement | 220 ± 10% VAC, 50/60Hz, 1-Phase  |
| Heater Capacity        | 3.5 kW   |
| Power Rating           | 21 amps  |
| Plug Configuration     | 30 AMP Plug  |

#### H. Standard Accessories

PVC Coated Wire Shelf : 3 EA  
Shelf Support : 12 EA  
Instruction Manual : 1 EA  
Warranty Card : 1 EA

#### I. Options & Accessories

| Art No. | Descriptions                          |
|---------|---------------------------------------|
| OEC-006 | JSC-2500 Touch Screen Controller      |
| OEC-007 | JSC-950 Touch Screen Controller       |
| OER-010 | 6-Channel Chart Recorder              |
| PHS-C13 | PVC Coated Wire Shelf, W570 x D580 mm |
| PHS-A99 | Shelf Support, Set of 4 EA            |

**J. Warranty**

1 Year full coverage warranty