



## **SCO Series: SCO6AD**

SHEL LAB High Heat Auto Decontamination CO<sub>2</sub> Incubator



## Ideal for Clinical, Analytical, and General Laboratory Applications

The SCO6AD unit provides an optimized culturing environment with passive humidification, highly stable CO<sub>2</sub> levels, and tight temperature uniformity to safeguard your cell sample populations.

### Features and Benefits

Copper gas plumbing, a high-heat auto decontamination cycle, and a glass viewing door gives the SCO6AD enhanced protection against microbiological contamination.



- +** Infrared (IR) sensor for quick recovery of CO<sub>2</sub> levels after door openings. This sensor does not need to be removed during the high-heat decontamination cycle.
- +** USB data logging capabilities.
- 1** Advanced PID temperature control system for sensitive response.
- 2** Independent over temperature set point and operational control override for additional safety.
- 3** Side-mounted access port, 1.5" inner diameter (3.81cm) for independent cables, sensors, and instrumentation.
- 4** Stainless steel interior construction for long life operation, easy cleaning.
- 5** Heated Copper CO<sub>2</sub> inlet to promote temperature uniformity and reduce the risks of contamination and condensation.
- 6** Autoclavable shelving system.
- 7** Auto decontamination cycle designed to stop microbial contamination caused by mycetoza, yeast, viruses, bacteria, and a variety of other microorganisms.
- 8** Heated door to ensure superior temperature uniformity.
- 9** Sealed inner glass door allows for viewing without disturbing the critical growth atmosphere and allows for improved gas utilization and condensate reduction.
- 10** Unique air jacketed design provides excellent temperature uniformity of +/-0.25°C at 37°C.
- +** Safety certified CAN/CSA, UL, EN, IEC 61010, and compliant with CE.



## Contamination Control

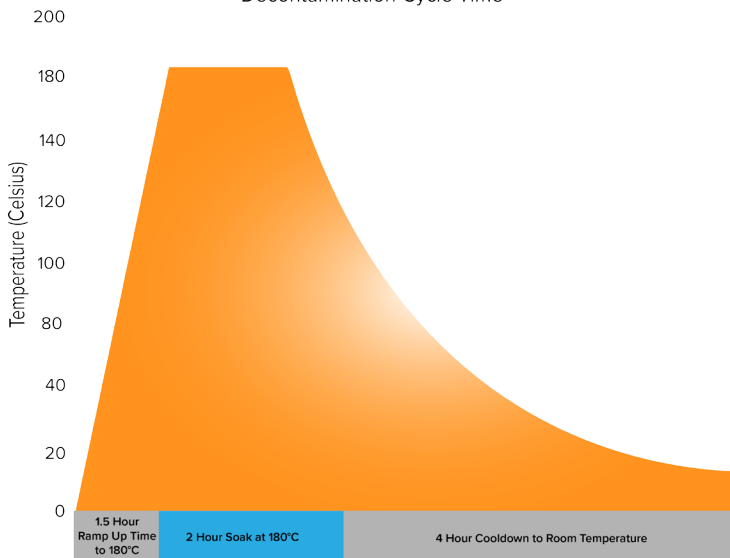
Extensive use of copper in the CO<sub>2</sub> sample port, humidity reservoir, and heated CO<sub>2</sub> feed line adds reassurance that foreign microbes will not affect test results. Cleanup is a breeze with the all stainless steel chamber, coved corners, and autoclavable door gasket. Optional copper shelves are available for additional contamination control.

## Applications:

- Cell Culture
- Tissue Culture
- Food Analysis
- Stem Cells
- Microbiology
- Plant Cell Culture



Decontamination Cycle Time

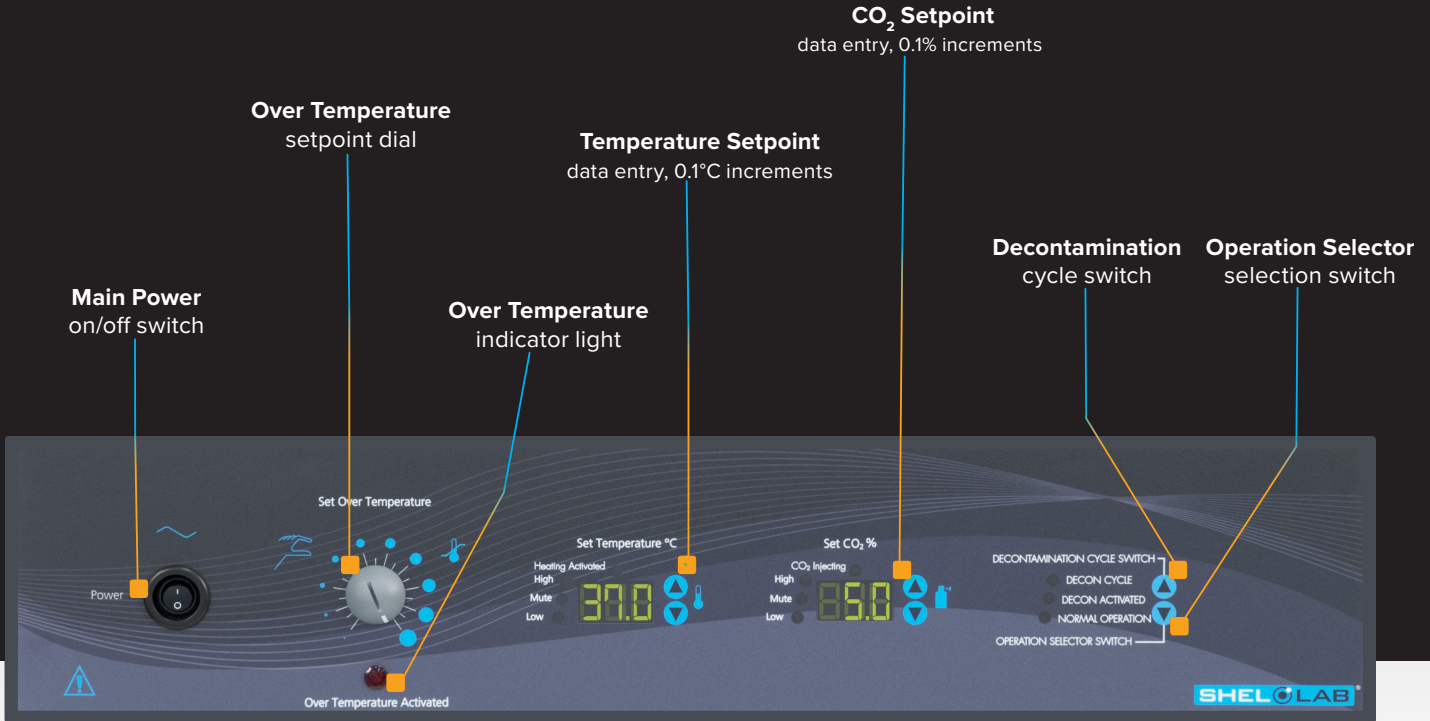


## Control, Feedback, and Monitoring

The advanced PID (proportional, integral, derivative) controller commands proportional power to the heating elements and CO<sub>2</sub> injection frequency to provide the most accurate and responsive control. Each controller is matched to the incubator chamber volume to assure faster response to setpoint without overshoot, and quicker recovery following door openings. Indicator lights are included for visual status feedback on critical functions.

## Integrated Control Panel

All controls are centrally located on the main panel including manual power, independent over temperature control, digital temperature/CO<sub>2</sub> adjustments, and indicator lights for all functions.



## SCO6AD Unit Specification Chart

|                               | <b>SCO6AD</b>                                  |
|-------------------------------|--|
| Interior Volume, Nominal      | 5.9 cu.ft. (167 liters)                        |
| Interior Dimensions W x H x D | 20.2" x 25.5" x 20.0"<br>51.3 x 64.7 x 50.8cm  |
| Exterior Dimensions W x H x D | 28.5" x 39.5" x 30.8"<br>72.4 x 100.3 x 78.2cm |
| Interior Construction         | 300 series stainless steel                     |
| Exterior Construction         | 20 gauge steel,<br>powder coated               |
| Shelves (See Accessories)*    | 3 standard, 8 total                            |
| Maximum Weight Per Shelf*     | 35 lbs/15.8kg                                  |
| Permitted Total Load          | 105 lbs/47.6kg                                 |

\*Extra standard and reinforced shelves available. See Accessories.



## SCO6AD Unit Information Chart

| Order Model Number, Voltage Specific        | SCO6AD    |           |
|---|-----------|-----------|
|   | SCO6AD    | SCO6AD-2  |
| <b>Electrical, 50/60Hz, AC, 1Ø</b>          |           |           |
| Voltage                                     | 110V-120V | 220V-240V |
| Full Load Amps                              | 12        | 6.0       |
| Nominal Power (watts @37°C)                 | 130       | 110       |
| Recommended Breaker, Amps                   | 15        | 15        |
| Power Cord Supplied                         | NEMA5-15P | EU1-16P   |
| <b>CO<sub>2</sub> Range</b>                 | 1-20%     | 1-20%     |
| <b>Recovery CO<sub>2</sub> at 5%*</b>       | < 5min.   | < 5min.   |
| <b>Sensor Type</b>                          | Infrared  | Infrared  |
| <b>Temperature Uniformity</b>               |           |           |
| At 37°C                                     | ± 0.25°C  | ± 0.25°C  |
| <b>Humidity Range Passive (Ambient 95%)</b> | ✓         | ✓         |
| <b>Temperature Range Recovery 37°C*</b>     |           |           |
| Recovery to 37°C after 30 sec. Door Opening | 6.0 min.  | 6.0 min.  |

\* To 98% of set value.

### DIN 12880 Compliance

SHEL LAB SCO6AD High Heat Decontamination CO<sub>2</sub> Incubator is designed to meet or exceed the performance criteria established through DIN 12880:2007:05 and ASTM E1292-94 (Reapproved 2006.).

Note: DIN 12880 is an international standard for measuring the performance of electrical laboratory ovens and incubators based on Deutsches Institut Fur Normung E.V. (German National Standard), 05/01/2007.

## Site Preparation and Installation Guides

|                              | SCO6AD           |
|------------------------------|------------------|
| Wall Clearance, Sides        | 4.0" (10.0cm)    |
| Wall Clearance, Roof         | 2.0" (5.0cm)     |
| Access Port (Inner Diameter) | 1.5" (3.81cm)    |
| Unit Weight Empty            | 136 lbs (61.7kg) |
| Shipping Weight              | 302 lbs (137kg)  |

## Options and Accessories

|  | SCO6AD                     |
|--|----------------------------|
| Shuttle Valve for Dual CO <sub>2</sub> Tanks                           | 912-950-0012               |
| 4-20 mA outputs for CO <sub>2</sub>                                    | 912-950-0013               |
| Locking Outer Door: SCO6AD, SCO6AD-2                                   | 912-952-0021, 912-952-0027 |
| Tri-Glass Door   | 912-952-0030               |
| Stacking Stand   | 9000575                    |
| Caster Platform  | 9000574                    |
| Copper Shelf Package: Includes 3 copper shelves, 6 copper shelf slides | 9750582                    |
| Extra Shelf, Copper, Max Weight 35 lbs (15.8kg)                        | 5820504                    |
| Extra Slide, Copper, 2 Required Per Shelf                              | 5820505                    |
| Extra Stainless Steel Shelf and Slide Kit, Max. Weight 35 lbs (15.8kg) | 9751235                    |
| Extra Shelf, Reinforced. Max. Weight 50 lbs (22.7kg)                   | 912-975-0004               |
| Extra Standard, Stainless Steel, 2 Required Per Shelf                  | 5170646                    |
| Extra Slide, Stainless Steel, 2 Required Per Shelf                     | 5121528                    |

Options must be specified when ordering. Contact SHEL LAB for additional information.



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