



SCO Series - SCO6AD

SHEL LAB High Heat Auto Decontamination CO₂ Incubator





Ideal for Clinical, Analytical, and General Laboratory Applications

The SCO6AD unit provides an optimized culturing environment with passive humidification, highly stable CO₂ 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 CO₂ 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 CO₂ 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 mycetozoa, 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 $\pm 0.25^{\circ}\text{C}$ at 37°C .
- Safety certified CAN/CSA, UL, EN, IEC 61010, and compliant with CE.



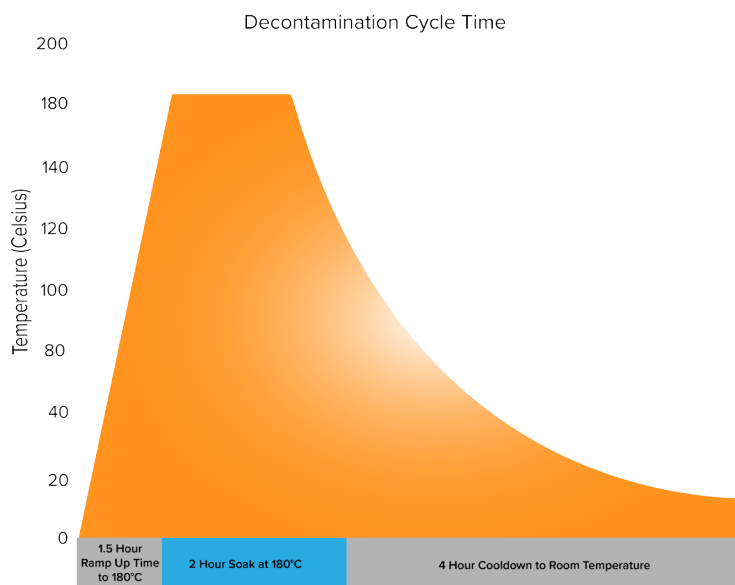
Made in the USA

Contamination Control

Extensive use of copper in the CO₂ sample port, humidity reservoir, and heated CO₂ 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

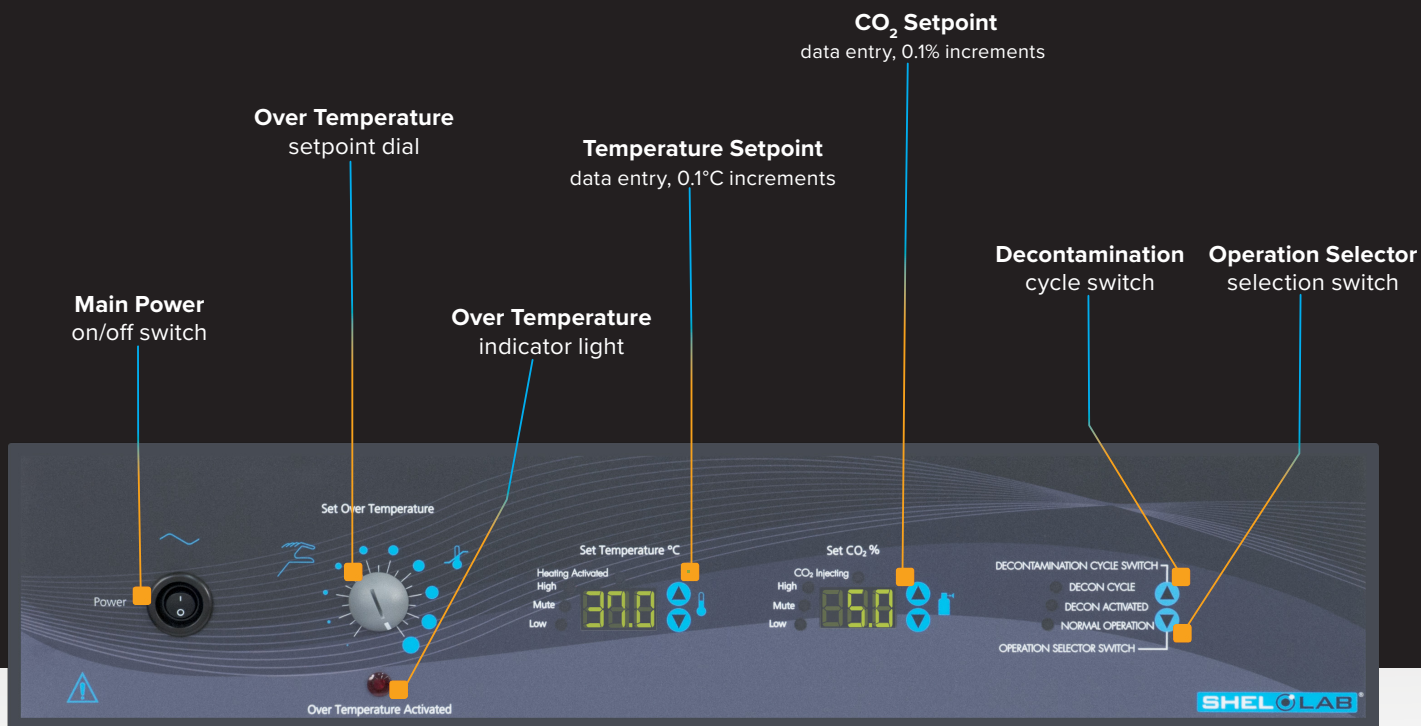


Control, Feedback, and Monitoring

The advanced PID (proportional, integral, derivative) controller commands proportional power to the heating elements and CO₂ 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/CO₂ adjustments, and indicator lights for all functions.



SCO6AD Unit Specification Chart

	SCO6AD
Interior Volume, Nominal	5.9 cu.ft. (167 liters)
Interior Dimensions W x D x H	20.2" x 20.0" x 25.5" 51.3 x 50.8 x 64.7cm
Exterior Dimensions W x D x H	28.5" x 30.8" x 39.5" 72.4 x 78.2 x 100.3cm
Interior Construction	300 series stainless steel
Exterior Construction	20 gauge steel, 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
Electrical, 50/60Hz, AC, 1Ø		
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
CO₂ Range	1-20%	1-20%
Recovery CO₂ at 5%*	< 5min.	< 5min.
Sensor Type	Infrared	Infrared
Temperature Uniformity		
At 37°C	± 0.25°C	± 0.25°C
Humidity Range Passive (Ambient 95%)	✓	✓
Temperature Range Recovery 37°C*		
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 CO₂ 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 ₂ Tanks	912-950-0012
4-20 mA outputs for CO ₂	912-950-0013
Locking Outer Door: SCO6AD, SCO6AD-2	912-952-0021, 912-952-0027
Tri-Glass Door	912-952-0030
Stacking Stand	9000599
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	5121028

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



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• Specifications subject to change without notice. 2017 Sheldon Manufacturing P/N 0740559. 10/17

