



SCO31/40/58-2, Large CO2 Incubators

Ideal for Clinical, Analytical, & General Laboratory Applications:

SCO water jacketed CO2 incubators provide the uniform temperatures and highly stable CO2 environments necessary to prevent shocks to cell samples.

Features and Benefits: Contamination control, data logging capabilities, and automatic CO2 deviation alarm protect the SCO large capacity CO2 incubators 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 & operational control override for additional safety.
 3. Side-mounted access port, 1.75" inner diameter (4.45cm) for independent cables, instrumentation.
 4. Stainless steel interior construction for long life operation, easy cleaning.
 5. Condensed connection panel includes; 4-20 mA, dry contact alarm, CO2 inlet, and CO2 sample port.
 6. Autoclavable shelving system.
 7. Crafted forced-air conduction provides excellent temperature uniformity of $\pm 0.5^{\circ}\text{C}$ at 37°C .
 8. Roller track ensures ease of use with roll-in bottle racks.
 9. Sealed glass window allows for viewing without disturbing the critical growth atmosphere and allows for improved gas utilization and condensate reduction.
- + Safety certified CAN/CSA, UL, EN, IEC 61010, and compliant with CE.

Applications:

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

Contamination Control:

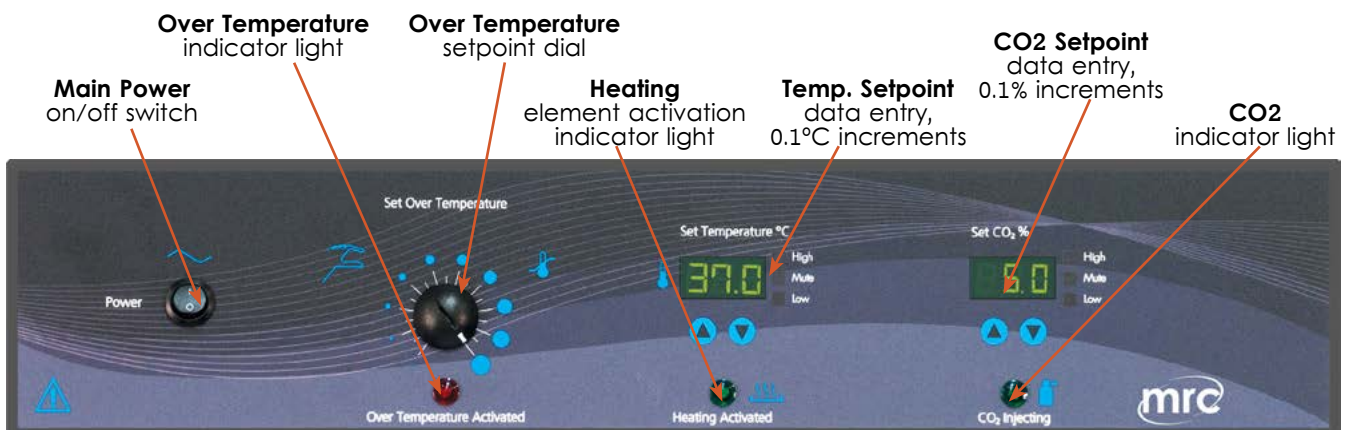
Extensive use of copper in the humidity heated CO2 feed line and precise airflow management designed to prevent condensation adds reassurance that foreign microbes will not affect test results. Cleanup is a breeze with the all stainless steel chamber.

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.



Model	SCO31-2	SCO40-2	SCO58-2
Unit Specification Chart			
Interior Volume, Nominal	879 liters	1125 liters	1642 liters
Interior Dimensions (W x H x D)	83.1 x 66.0 x 160.0cm	88.9 x 66.0 x 191.7cm	109.2 x 88.9 x 172.7cm
Exterior Dimensions (W x H x D)	100.3 x 85.8 x 191.2cm	108.0 x 87.6 x 228.6cm	128.2 x 113.0 x 218.4cm
Interior Construction	300 series stainless steel		
Exterior Construction	20 gauge steel, powder coated		
Shelves (See Accessories)*	6 standard, 30 total		
Maximum Weight Per Shelf*	22.7kg		
Permitted Total Load	136.1kg		
Site Preparation and Installation Guides			
Wall Clearance, Sides	10.0cm		
Wall Clearance, Roof	5.0cm		
Access Port (Inner Diameter)	4.45cm		
Unit Weight Empty	226.8kg	260.4kg	430.9kg
Shipping Weight	262.6kg	309.4kg	492.2kg
Electrical, 50/60Hz, AC, 1Ø			
Voltage	220V-240V		
Full Load Amps	8	9	8
Nominal Power (watts @37°C)	300	340	350
Recommended Breaker, Amps	16		
Power Cord Supplied	EU1-16P		
CO ₂ Range	1-20%		
Recovery CO ₂ at 5%*	< 5min.		
Sensor Type	Infrared		
Temperature Uniformity			
At 37°C	± 0.5°C		
Temperature Range Recovery 37°C**			
Recovery to 37°C after 30 sec. Door Opening	8.0 min.	7.0 min.	

*Extra standard and reinforced shelves available. See Accessories
 **To 98% of set value.

Options and Accessories:

- Shuttle Valve for Dual Co2 Tanks
- CO2 Cylinder Regulator Kit
- Caster Platform
- Chart Recorder Option
- Solid Door
- Reverse Door
- Locking Outer Door
- Extra Shelf, Stainless Steel, Max. Weight 22.7kg
- Extra Shelf, Reinforced, Max Weight 34.0kg
- Extra Shelf Clips, 4 Required Per Shelf.



SCO31-2



SCO40-2