



SCO2/5W-2, Water Jacketed CO₂ Incubator

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: Copper gas plumbing and a glass viewing door enhance the SCO water jacket CO₂ incubators with extensive 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 & operational control override for additional safety.
 3. Side-mounted access port, 1" inner diameter (2.85cm) 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. Unique water jacketed design provides excellent temperature uniformity of $\pm 0.2^{\circ}\text{C}$ at 37°C .
 8. Patented copper cage HEPA filter for reduced risk of contamination.
 9. Heated door to ensure superior temperature uniformity.
 10. Sealed inner glass door 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 • Tissue Culture • Food Analysis
- Stem Cells • Microbiology • Plant Cell Culture.

Contamination Control:

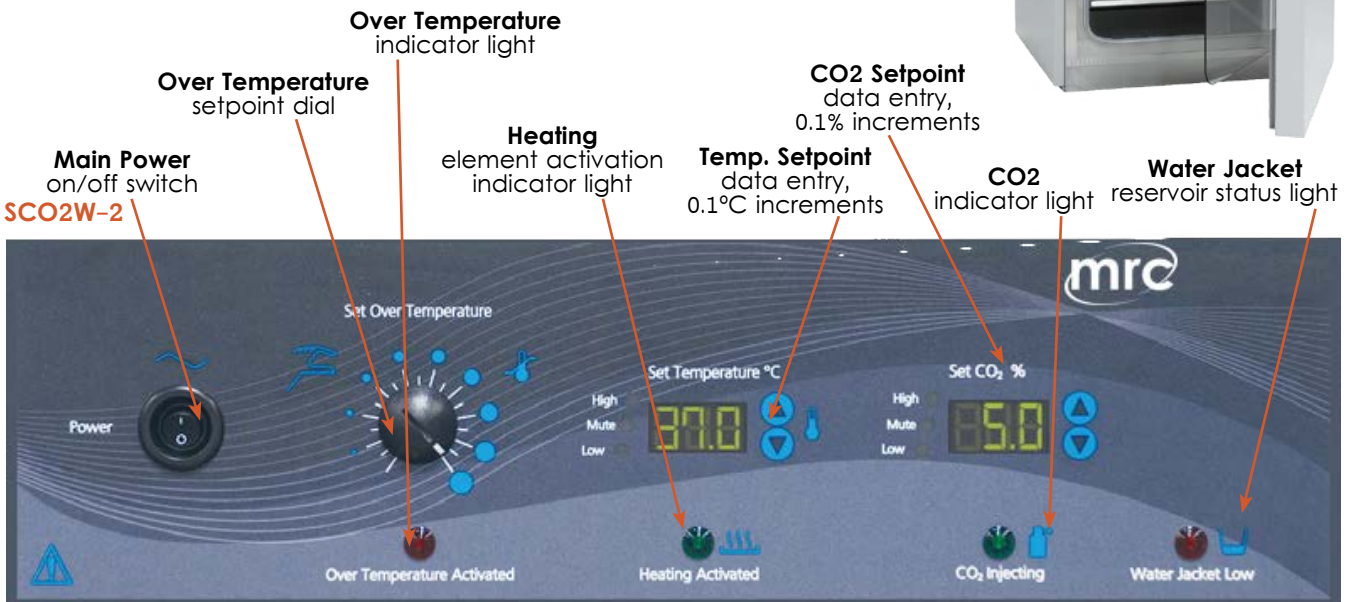
Extensive use of copper in the CO₂ sample port, humidity reservoir, heated CO₂ feed line, and housing of the patented HEPA filtration system adds reassurance that foreign microbes will not affect test results. Cleanup is a breeze with the all stainless steel chamber, coved corners, and autoclavable door gasket. Optional copper shelves are available for even more contamination control.

Control, Feedback, and Monitoring:

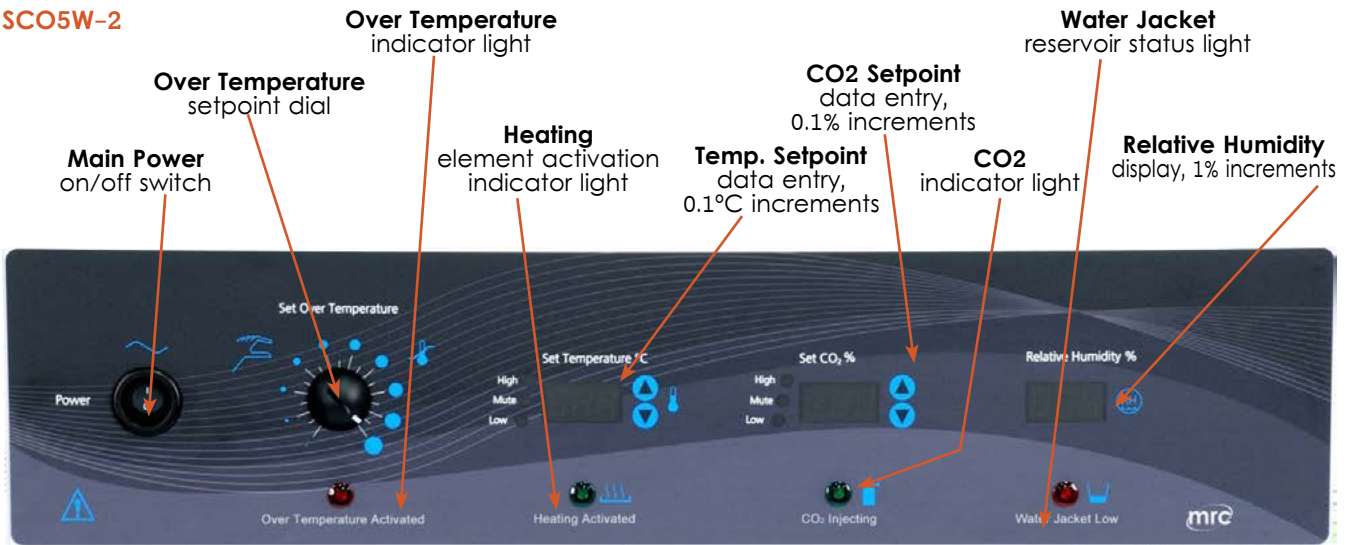
The advanced PID (proportional, integral, derivative) controller commands proportional power to the heating elements and CO₂ injection frequency to provide the most accurate and responsive control. Each controller is matched to the incubator chamber volume to assure faster response to setpoint without 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.



SCO5W-2



Model	SCO2W-2	SCO5W-2
Unit Specification Chart		
Interior Volume, Nominal	42 liters	142 liters
Interior Dimensions (W x H x D)	40.0 x 40.0 x 26.0cm	48.9 x 50.0 x 58.0cm
Exterior Dimensions (W x H x D)	53.4 x 57.2 x 68.6cm	66.0 x 64.8 x 102.2cm
Interior Construction	300 series stainless steel	
Exterior Construction	20 gauge steel, powder coated	
Shelves (See Accessories)*	3 standard, 8 total	3 standard, 16 total
Maximum Weight Per Shelf*	15.8kg	
Permitted Total Load	45.3kg	90.7kg
Site Preparation and Installation Guides		
Door Swing Clearance (Nominal)	48.3cm	61.0cm
Wall Clearance, Sides	10.0cm	
Wall Clearance, Roof	5.0cm	
Access Port (Inner Diameter)	4.45cm	
Unit Weight Empty	61.7kg	115.2kg
Shipping Weight	81.2kg	135.6kg
Electrical, 50/60Hz, AC, 1Ø		
Voltage	220V-240V	
Full Load Amps	3.5	
Nominal Power (watts @37°C)	300	400
Recommended Breaker, Amps	15	
Power Cord Supplied	EU1-16P	
CO ₂ Range	1-20%	
Recovery CO ₂ at 5%*	< 5min.	
Sensor Type	Infrared	
Humidity Range Passive (Ambient 95%)	+	
Temperature Uniformity		
At 37°C	± 0.2°C	
Temperature Range Recovery 37°C**		
Recovery to 37°C after 30 sec. Door Opening	8.0 min.	5.0 min.

*Extra standard and reinforced shelves available. See Accessories

**To 98% of set value.

Options and Accessories:

- CO₂ Cylinder Regulator, Dual Stage
 - 4-20 mA outputs for CO₂
 - Caster Platform
 - Cooling Coils
 - Tri-Glass Door
 - Stacking Rack
 - Copper Shelf Kit: Includes 3 Shelves; 6 Shelf Slides
 - Extra Shelf, Copper, Max Weight 35 lbs (15.8kg)
 - Extra Slide, Copper
 - Extra Stainless Steel Shelf and Slide Kit, Max. Weight 35 lbs(15.8kg)
- Options must be specified when ordering. Contact SHEL LAB for additional information.