

## 48L GOLD



## 48L SILVER



Scottish based GS Biotech, design and manufacture a range of CO<sub>2</sub> Cell Culture Incubators. The range is initially comprised of:- 14, 48, and 170 litre chamber capacities.

All models are close descendants of the first six-sided, direct heat incubator. GS Biotech has built on this lineage with smart blending of older and newer technologies to build reliability, performance and choice into the range - at a fair price.

The range is designed around a scalable architecture and offers the following features as standard:-

- ✓ Optimum chamber environment, profiled heating creates gentle circulation –no fan or HEPA filter.
- ✓ Seamless chamber, with rounded interior corners makes cleaning easy.
- ✓ Removable shelves are non-tip.
- ✓ Sealed inner glass door allows chamber viewing.
- ✓ Temperature range programmable from 4 °C above ambient to 50 °C.
- ✓ Infrared CO<sub>2</sub> Sensor, with auto self-referencing function.
- ✓ CO<sub>2</sub> range programmable from 0.2 to 20 %.
- ✓ Large, easy to read LCD display with LED backlight.
- ✓ Removable, seamless, stainless steel humidity reservoir.
- ✓ 25mm access port for cable pass-through etc.
- ✓ HEPA filtration for all incoming gasses.
- ✓ Large range of options allows you to configure each incubator for each task.
- ✓ Optional data capture and reporting for QA and verification purposes.
- ✓ 3 Year Warranty (extendable).

Control System Safety Features Include:

- ✓ Independent over temperature cut-out.
- ✓ Calibration and programmed data internally backed up to guard against loss.



## **48L Model Options**

### **1. High Temperature Decon Cycle**

This option takes the internal temperature to 120°C and maintains this temperature for 4hrs before natural cooling to allow normal function.

GOLD & SILVER MODEL OPTION

### **2. 2-Inner Door Option**

4 Inner doors allow chamber conditions to be more readily maintained when frequent entry is required to the chamber.

GOLD & SILVER MODEL OPTION

### **3. Oxygen Control**

2 Oxygen control options are available:  
1-19% & 0.1-19%  
Both control systems consist of nitrogen injection to accurately control the desired below ambient Oxygen level.

GOLD MODEL OPTION ONLY

### **4. Humidity Tray Warning**

An optical level sensor is an option that monitors humidity tray water level, this consists of an audible alarm. The detection level provides in excess of 2 days normal operation loss so as to accommodate long weekend periods of non attendance.

GOLD & SILVER MODEL OPTION



## Features

## 48L Gold

## 48L Silver

170L SEAMLESS CHAMBER WITH FULLY ROUNDED CORNERS

DRY WALLED CHAMBER WITH NO CONDENSATE SPOT

INFRARED HERMETICALLY SEALED CO<sub>2</sub> SENSOR

CO<sub>2</sub> AUTO REFERENCE SYSTEM

SEALED INNER GLASS DOOR

LARGE LCD DISPLAY WITH LED BACKLIGHT

25mm ACCESS PORT WITH SEALING PLUGS

RS232 OUTPUT SOCKET

ON BOARD DATALOGGER

HIGH TEMPERATURE DECONTAMINATION

4 INNER DOOR OPTION

O<sub>2</sub> CONTROL (1-19% OR 0.1-19%)

HUMIDITY TRAY WARNING

COOLING SYSTEM

•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	•
•	○
○	X
○	○
○	○
○	X
○	○
○	X

## Options

## 48L Gold

## 48L Silver

230V 50/60Hz  
110v 50/60Hz  
HIGH TEMPERATURE DECONTAMINATION  
4 INNER DOOR OPTION  
O<sub>2</sub> CONTROL 1-19%  
O<sub>2</sub> CONTROL 0.1-19%  
RS232 OUTPUT SOCKET  
HUMIDITY TRAY WARNING

48G-230	48S-230
48G-110	48S-110
48G-014	48S-014
48G-022	48S-022
48G-011	X
48G-031	X
•	48S-020
48G-018	48S-018

- Standard Equipment

● Option available

**X**Option not available



## Accessories

CO<sub>2</sub> CYLINDER AUTO CHANGEOVER UNIT  
CO<sub>2</sub> TWO STAGE REGULATOR  
IN LINE PRESSURE REGULATOR  
CO<sub>2</sub> SUPPLY LINE FILTERS (2OFF)  
CO<sub>2</sub> AUTO REFERENCE FILTER  
HUMIDITY TRAY  
CO<sub>2</sub> ELECTRONIC ANALYSER  
CO<sub>2</sub> /O<sub>2</sub> ELECTRONIC ANALYSER  
STACKING KIT

## Order code

GSB-5000  
GSB-5010  
GSB-5030  
GSB-5020  
GSB-5060  
GSB-5940  
GSB-6150  
GSB-6831  
GSB-1160

## TECHNICAL SPECIFICATION

### TEMPERATURE MANAGEMENT

RANGE: 4°C ABOVE AMBIENT TO 50°C  
CONTROL: ± 0.1°C  
STABILITY: ± 0.1°C  
UNIFORMITY ± 0.3°C

### RELATIVE HUMIDITY

TRAY CAPACITY: 0.5 LITRES  
HUMIDITY: UP TO 95% @ 37°C

### SHELVES

SOLID SHELVES: 3 SHELVES  
DIMENSIONS: 378(W) X 281(D)mm

### CO<sub>2</sub> CONTROL

RANGE: 0.2 - 20%  
CONTROL: ± 0.1°C  
STABILITY: ± 0.2°C  
UNIFORMITY: ± 0.1°C  
RECOVERY RATE: > 0.7% PER MINUTE  
CONNECTION: 6mm TUBING  
GAS PRESSURE: 0.35BAR (5PSI)

### DIMENSIONS

CHAMBER: 400(W) X 301(D) X 400(H)mm  
EXTERNAL: 529(W) X 442(D) X 589(H)mm  
CRATED: 654(W) X 617(D) X 824(H)mm  
  
UNIT WEIGHT: 38KG  
CRATED WEIGHT: 60KG

### ELECTRICAL SUPPLY

VOLTAGE: 100/120V OR 220/240V  
50/60 Hz  
  
POWER: 500W(STD) / 1000W(HT)  
HOLD ENERGY: < 0.1kWh @ 37°C