# CULTURE AS NATURE INTENDED





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## PHO<sub>2</sub>X BOX - A NEW GAS CONTROLLED HYPOXIA SYSTEM

Baker Ruskinn's PhO<sub>2</sub>x Box is a new, easy to use and economical Physoxia/Hypoxia system designed for in vitro cell culture experiments. PhO<sub>2</sub>x Box comprises a single Gas Controller (offering both O<sub>2</sub> and CO<sub>2</sub> control) and a Cell Culture Chamber. The Cell Culture Chamber can be placed on a lab bench, or be placed inside an Incubator or a Workstation.



<sup>\*</sup>Printed with permission



Figure 1. blot provided by PhD Daniela Mennerich, University of Oulu, Finland, showing proof of hypoxic conditions in the Ph0,x Box inside a standard C0, Incubator

**Gas Controller** 

- Controls and Monitors O<sub>2</sub> and CO<sub>2</sub> levels with a single touchscreen
- Intuitive touchscreen with large font number display
- Small footprint (325mm wide x 298mm deep)
- Easy user set up,takes around 10 minutes
- Only needs N<sub>2</sub> and CO<sub>2</sub> cylinders for operation for lower running costs
- 2 year warranty for peace of mind and lower running costs

## PHO<sub>2</sub>X BOX INCLUDED FEATURES



#### **Touchscreen Control**

- O<sub>2</sub> control (from 0.1% to 20.0% in 0.1% increments)
- $CO_2$  control (from 0.1% to 20.0% in 0.1% increments)
- Hypoxic Cycling
- Temperature Display (of Cell Culture Chamber)

- Data Log:
- Up to 12 Months data history
- One Data Set stored per minute, each Data Set comprises: Time, Date,  $\rm O_2$  (Set/Actual), CO\_2 (Set/Actual)
- Stored on SD card provided

#### Audible Alarms:

• Low Gas (either CO<sub>2</sub> or N<sub>2</sub>)

### **Culture Chambers**

Your choice of 4 types of Cell Culture Chamber. Each is gas tight, has removable shelving and is easy to clean

- Black (light reducing) Small and Large
- Clear Small and Large



### **CULTURE CHAMBER DIMENSIONS**

		SMALL (Black or Clear) Chamber		LARGE (Black or Clear) Chamber	
		mm	inches	mm	inches
	Width	355	14	355	14
External dimensions	Height	173	6.8	238	9.4
uniteriorierie	Depth	369	14.5	369	14.5
	Width	335	13.2	335	13.2
Internal	Height	140	5.5	205	8.1
dimensions	Depth	280	11	280	11
	Volume	13.1 Litres		19.2 Litres	
Workstation capacity-96 well plates	Number of plates (128mm x 86mm x 17mm)	8 plates on shelf, (4 stacks of 2 plates high on shelf)		of 2 plate	, (4 stacks s high per shelves)
Workstation capacity-T 75 flasks	Number of flasks (150mm x 80mm x 86mm)	6 (on shelf)			8 ch shelf)
PhO₂x Box System	Kgs/Lbs	5.5 Kg/12.1 lbs (chamber) & 5.5 kg/12.1 lbs (controller)		(cham 5.5 kg/	14.3 lbs ber) & 12.1 lbs roller)

Usable Internal Volume: 13.1 litres (Small Chamber) | 19.2 litres (Large Chamber)

			mm	inches
	Gas Controller	Width	325	12.8
External	Height	238	9.4	
	dimensions	Depth	298	11.7

### **PERFORMANCE DATA**

	Gas Type		Coefficient of Variation (based on >700 readings)	
	0 <sub>2</sub> %	CO <sub>2</sub> %	0 <sub>2</sub> %	CO <sub>2</sub> %
	0.1	5	<8%	<5%
Settings on Controller	1	5	<5%	<5%
	5	5	<2%	<5%

### PERFORMANCE DATA AT DIFFERENT GAS LEVEL SETTINGS

	0.1% O <sub>2</sub> / 5.0% CO <sub>2</sub>		
	02	CO <sub>2</sub>	
Mean	0.1	5.0	
%CV	6.7	2.2	

	1% O <sub>2</sub> / 5.0% CO <sub>2</sub>	
	0 <sub>2</sub>	CO2
Mean	1.1	4.9
%CV	7.9	1.9

	5% 0 <sub>2</sub> / 5.0% CO <sub>2</sub>		
	0 <sub>2</sub>	CO <sub>2</sub>	
Mean	5.1	4.9	
%CV	1.3	1.6	

## **OPTIONAL ACCESSORIES**

Single Cable Gland - Must be factory fitted

Gas Sample Port

O<sub>2</sub> Meter

## **POWER SPECIFICATIONS**

Voltage: 100 Volts to 240 Volts AC

Power: 15 Watts

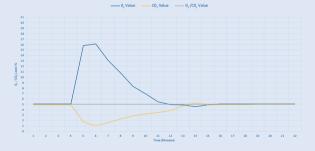
130kWh/Year (Based on 24 / 7 / 365)



Time to Set Point Large Culture Chamber 0,-5% CO,-5%



30 Second Door Opening Recovery Large Culture Chamber 02-5% CO2-5%



#### 5 Minute Door Opening Recovery Large Culture Chamber 0,-5% C0,-5%





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Our Baker Ruskinn products are packed with new, innovative features that allow you to study even the most complex cell interactions under perfect physiological oxygen conditions. Whether you're hoping to replicate the environment of blood vessels or lung tissue, Baker Ruskinn provides the best tools for the job.

Vertrieb & Service durch:



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