CULTURE AS NATURE INTENDED

PHO$_2$X BOX

BAKER RUSKINN

www.bakerco.com

PHO$_2$X BOX - A NEW GAS CONTROLLED HYPOXIA SYSTEM

Baker Ruskinn's PhO$_2$x Box is a new, easy to use and economical Physoxia/Hypoxia system designed in vitro cell culture experiments. PhO$_2$x Box comprises a single Gas Controller (offering both O_2 and CO_2 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.

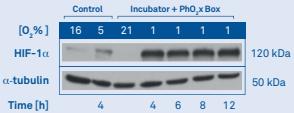

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Figure 1. Western blot from University of Oulu Finland, showing proof of hypoxic conditions in the Ph02x Box inside a standard C02 Incubator

Gas Controller

- Controls and Monitors O_2 and CO_2 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_2 and CO_2 cylinders for operation for lower running costs
- 2 year warranty for peace of mind and lower running costs

PHO$_2$X BOX INCLUDED FEATURES

Touchscreen Control

- O_2 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, O_2 (Set/Actual), CO_2 (Set/Actual)
- Stored on SD card provided

Audible Alarms:

- Low Gas (either CO_2 or N_2)

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
External dimensions	Width	355	14	355	14
	Height	173	6.8	238	9.4
	Depth	369	14.5	369	14.5
Internal dimensions	Width	335	13.2	335	13.2
	Height	140	5.5	205	8.1
	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)		24 plates, (4 stacks of 2 plates high per shelf, 3 shelves)	
Workstation capacity-T 75 flasks	Number of flasks (150mm x 80mm x 86mm)	6 (on shelf)		18 (6 on each shelf)	
PhO_2x Box System	Kgs/Lbs	5.5 Kg/12.1 lbs (chamber) & 5.5 kg/12.1 lbs (controller)		6.5 kg/14.3 lbs (chamber) & 5.5 kg/12.1 lbs (controller)	

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

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

PERFORMANCE DATA

	Gas Type		Coefficient of Variation (based on >700 readings)	
	O_2%	CO_2%	O_2%	CO_2%
Settings on Controller	0.1	5	<8%	<5%
	1	5	<5%	<5%
	5	5	<2%	<5%

PERFORMANCE DATA AT DIFFERENT GAS LEVEL SETTINGS

	0.1% O_2 / 5.0% CO_2	
	O_2	CO_2
Mean	0.1	5.0
%CV	6.7	2.2

	1% O_2 / 5.0% CO_2	
	O_2	CO_2
Mean	1.1	4.9
%CV	7.9	1.9

	5% O_2 / 5.0% CO_2	
	O_2	CO_2
Mean	5.1	4.9
%CV	1.3	1.6

OPTIONAL ACCESSORIES

Single Cable Gland - Must be factory fitted

Gas Sample Port

O_2 Meter

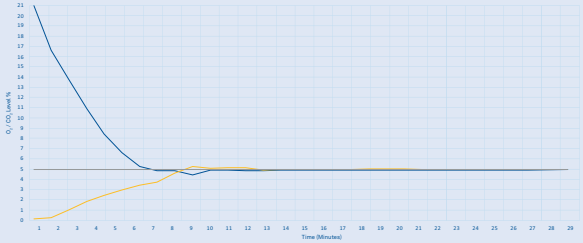
POWER SPECIFICATIONS

Voltage: 100 Volts to 240 Volts AC

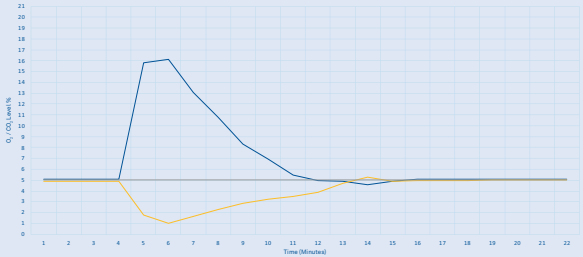
Power: 15 Watts

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

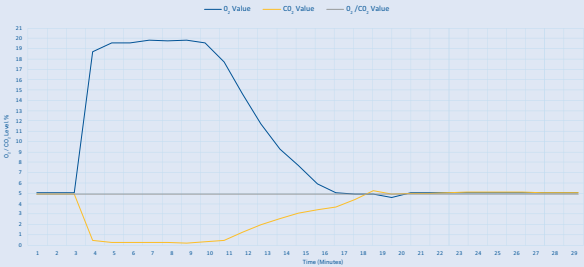
Time to Set Point Large Culture Chamber O_2-5% CO_2-5%



30 Second Door Opening Recovery Large Culture Chamber O_2-5% CO_2-5%



5 Minute Door Opening Recovery Large Culture Chamber O_2-5% CO_2-5%



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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.

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