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innovative laboratory technology

> place dishes

> in jar

> connect!

> get your atmosphere!

PetriSphere

Anaerobic Gas-System

Quick and convenient solution
Create atmospheres suitable for the culturing of anaerobic, microaerophilic and capnophilic bacteria in common anaerobic jars

Extremely rapid oxygen depletion
Develop anaerobic atmospheric conditions inside the jar in less than 1 minute

Flexibility
Chose the level of oxygen depletion (microaerophilic atmosphere)

Significant cost savings
Reduce capital and operating costs

Multiplt simultaneous atmospheres
Within multiple jars

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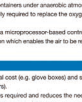
PETRISPHERE – RAPID OXYGEN DEPLETION – NO CONSUMABLES

Principle
When performing quality control for food, drink, cosmetic or hygiene products, samples are tested for the presence of anaerobic bacteria, the cause of many infectious diseases and food poisoning. Such sample are incubated in containers under anaerobic atmospheric conditions. Specific, expensive compounds are normally required to replace the oxygencontaining air with dry nitrogen.
The new PetriSphere™ system consists of a microprocessor-based controller, a diaphragm vacuum pump and a gas reservoir connection which enables the air to be replaced by nitrogen or carbon dioxide gas.

Cost and convenience
Traditional methods may involve high capital cost (e.g. glove boxes) and significant use of consumables (e.g. bag-based anaerobic jars).
PetriSphere lowers the cost of consumables required and reduces the need for compound supplies and waste products. The power and control of the vacuum system is sufficient to operate without sachets or catalysts.

Simple to use
Programmed using keyboard. Draining and filling with replacement gas (nitrogen or carbon dioxide) managed automatically. Gas extraction can be controlled (up to 2mbar) to reduce the risk of cell lysis.



Alternative Gases
Where alternative gases / customized gas-mixtures are desirable, only one lecture bottle is required.

Rapid Oxygen Depletion
PetriSphere generates an anaerobic atmosphere (O2<0.05%) in less than 3 minutes (using a standard jar). Sensitive strains remains viable.

Simple Assembly
The click connectors, equipped with an inbuilt one-way valve, make it easy to disconnect the jar when placing in an incubator.

Specification motor

Ultimate pressure	< 2 mbar
Pumping speed (at 50/60 Hz)	0.8/0.9 m³/h
Max. inlet pressure (mbar)	1 mbar
Max. outlet Powerpressure (mbar)	1 mbar
Bearing	maintenance free
Reference surface sound (Din 45635)	< 44 dB (A)
Power	0,83 kW
Protection (motor) DIN EN 600034-1	IP 20
Class of insulation DIN EN 600034-1	F (180°C)

Specification vacuum controller

Sensor interface	3 conductor
Scan frequency	10 Hz
Resolution ADC	12 Bit
Power supply	stabilized
Sensor signal	0,5 to 4,5 V
Sensor (integrated ceramic sensor)	1-1100 mbar
Sensor conformity	+/- 1% mbar
Pumping speed in³/h at 50/60 Hz	0,8/0,9

Specification dimensions

Dimensions (W/D/H)	(235/145/345 mm)
Weight	17 kg (5,5 Liter)

Order Information

PetriSphere Starter-Kit

112011-04 PetriSphere
Processing unit with 1 jar and quick connection kit

PetriSphere

112011-05 PetriSphere
Stand-alone processing unit, connectable to existing jars

Anaerobic Jar

112500 Anaerobic Jar
Complete with lid, seal, valve and rack

Spare Rack

112501-09 Spare Rack
In anaerobic jar, for 11-12 petri dishes, stainless steel

Silicone Tubing

820334 Silicone Tubing
For jar connection, 1 meter

Spare Jar Seal

112560-09 Jar Seal

PP Elbow Union

820590-1 Elbow Union
With hose nozzle, grey, fits to anaerobic jar, polypropylene

Service Kit

402044 Service Kit
For local 5 year service, contains unit seals

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