



ANAEROBIC WORKSTATION



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ANAEROBIC WORKSTATION



Product Overview

The Anaerobic Workstation is a compact, fully integrated solution designed for safe handling, incubation, and manipulation of anaerobic organisms under strictly controlled anoxic conditions. The system ensures precise control of oxygen, temperature, and humidity while providing user comfort, operational safety, and reliable long-term performance for microbiology laboratories.

Key Features

- Compact ergonomic workstation with high internal plate capacity
- Instant-access sleeveless ports for unrestricted hand movement
- Fully controlled anaerobic (anoxic) working environment
- Integrated airlock system for contamination-free sample transfer
- Touchscreen-based monitoring of all critical parameters
- Real-time oxygen monitoring with catalyst and anaerobic indicator system
- Complete gas management system supplied with cylinders and regulators

Technical

1. Working Capacity: 360 culture plates (Ø 90 mm)
2. Humidity Control: Up to $\geq 80\%$ RH (ambient dependent)
3. Anaerobic Condition: Fully anoxic environment support
4. Airlock Capacity: Minimum 10 plates per cycle; single plate entry supported
5. Airlock Cycle Time: ≥ 20 seconds
6. Gas System: Operates with anaerobic gas cylinder
7. Safety: Electronic gas leak detector included
8. Data Logging: Event logger with date & time stamped alarms and status notifications

Optional

1. Refrigerated 4°C~60°C.
2. Gases: (H₂, CO₂, N₂, O₂)

Model	DS-115AN-2	DS-115AN-3	DS-115AN-4
Temperature Control Range	Non-refrigerated: Ambient Temp +3°C ~70°C		
Temperature Uniformity	< $\pm 1^\circ\text{C}$		
Temperature Fluctuation	< $\pm 0.3^\circ\text{C}$		
Anaerobic Level	Oxygen content in operation chamber <0.1%		
Time for Anaerobic State (Sampling Chamber)	<5 minutes		
Method for Anaerobic State (Sampling Chamber)	Vacuum + Gas Replacement (Nitrogen + Mixed Gas)		
Time for Anaerobic State (Operation Chamber)	<50 minutes		
Method for Anaerobic State (Operation Chamber)	Vacuum + Gas Replacement (Nitrogen + Mixed Gas) + Trace Mixed Gas Supplement & Control		
Anaerobic Environment Maintenance Time	>15 hours (after stopping trace gas supply to operation chamber)		
Incubation Chamber Dimensions (L x W x H)	(Capacity: 200x90 mm petri dishes)	(Capacity: 360x90 mm petri dishes)	(Capacity: 480x90 mm petri dishes)
Power	1200W (Non-refrigerated)	1500W	1600W (Non-refrigerated)
Sampling Chamber Dimensions (W x D x H)	26x24x30 cm	26x24x30 cm	30x24x30 cm
Sampling Chamber Access Size (W x H)	17.6x20.6 cm	17.6x20.6 cm	17.6x20.6 cm
Operation Chamber Dimensions (W x D x H)	65x48x60 cm	45X65X80 cm	90x62x70 cm
External Dimensions (W x D x H)	100x60x120 cm	80X70X90 cm	140x68x137 cm

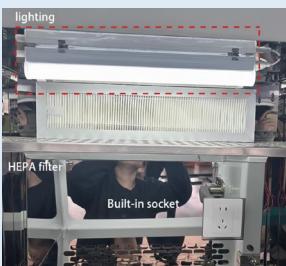


Operation		O2		Aisle	
PV	0. 0 p	PV	0. 0 %	PV	0. 0 kpa
program	N210/00 M10/00	SV	0. 0 %	program	N2 0/0 M 0/0
Humi	[Stop humidification]	Temp	[Heating steps]	CO2	[CO2 status]
PV	0. 0 %	PV	3. 90°C	PV	0. 0 %
SV	10. 0 %	SV	30. 0°C	SV	0. 0 %
O2	Aisle	Temp	CO2	Manual	Exhaust
Light	Sterilization	Socket			

Monitoring: Touchscreen display for Temperature humidity & oxygen concentration



Oxygen Monitoring: Integrated O2 sensor with catalyst monitoring



Lighting: Internal inspection lamp and illumination system

Utilities: Internal electrical socket provided



Triple deoxygenation machine:
(vacuum pumping, inert gas replacements
palladium catalyst deoxygenation O2 stability
≤0.1%)



Built-in socket:

Suitable for placing small instruments



Independent sampling room (airlock)

With on-key automatic ventilation automatic vacuuming
Side rail design facilitates sample extraction



Upward-opening glass window

effortless to open, unobstructed view and convenient

for talking in and

Putting away large containers (such as fermentation tanks)



Dual foot pedal switch

for inflating/deflating the main cabin freeing up your hand, it allow for

Simultaneous gas control during operation
enhancing operational safety