

CHAMBERS AND GLOVE BOXES

Controlled Atmosphere (Anaerobic Chamber) Glove Box

The **855-AC** (Anaerobic Chamber) has been designed for manually controlling your atmosphere when working with Oxygen sensitive materials. It is perfect for working in situations requiring low levels of Oxygen during critical isolation of the operator or your research materials. Any inert gas may be used.

Its main advantage is minimizing the risk of Oxygen entry into the main working chamber. If trace amounts of Oxygen happen to enter the main chamber, the Catalyst Heater reduces it to water vapor. The drying train can then be activated to remove any excess water vapor.

The **855-AC** is offered as a complete system ready to use. There are no other components required. All you need to add are your work samples and gas of choice.

This glove box has a capacity of 348 culture plates when using our suspended shelf accessory. Please refer to the Accessories Section (**800-SHELF-1**).

Some typical applications include:

Microbiology, Biochemistry, Plasma environment work, animal science studies, and electronic sub-assembly work.

The Basic Chemical Reaction.

The internal atmosphere is drawn off the floor of the glove box and is pushed up through the heating elements and the warm Palladium (Pd) pellets. The Hydrogen in the special gas mixture then reacts with trace amounts of Oxygen to create water vapor. The excess water vapor is then absorbed by the Molecular Sieve™ in the three drying train canisters. The canisters are re-chargeable.

The Catalyst Heater Function.

The catalyst heater has two main functions. It reduces trace amounts of Oxygen and it maintains the correct incubation temperature level for cultivating anaerobes (35 to 39 degrees C).



855-AC, Anaerobic Chamber

855-AC/Exp, Export Model

Basic Features Include:

- Standard 24 month warranty (not gloves or consumables.)
- Formed one-piece clear plastic top section with “Easy Clean” corners.
- Matched Die-Molded white thermoset bottom with “Easy Clean” corners.
- Two vacuum diaphragm pumps, one each for the drying train and the transfer chamber (purging).
- Drying train includes three (3) clear plastic canisters filled with Molecular Sieve.
- All controls are illuminated.
- “Bright Light” system (40,000 hour lamp guarantee).
- White ambidextrous Hypalon gloves.
- All clamps are adjustable to compensate for wear.
- Adjustable vacuum gauge on transfer chamber.
- Four (4) ground key-cock valves for purging.
- Transfer chamber is 12” (305mm) long x 11” (280mm) I.D.
- Electrical outlet (socket) strip (UL, CSA, & CE).
- Self sealing quick disconnects allow changing of the drying train without disturbing the internal atmosphere.

Electrical requirements.

North American 115-120 Volts, 60 Hz. 10 Amps. Export Models 220-240 Volts, 50 Hz. 5 Amps.

Distributed by:

Lab Unlimited
CARL STUART GROUP

Tallaght Business Park
Whitestown, Dublin 24,
Ireland
D24 RFK3

Tel: (01) 4523432
Fax: (01) 4523967

E-mail: info@labunlimited.com
Web: www.labunlimited.com

Quatro House, Frimley Road,
Camberley,
United Kingdom
GU16 7ER

Tel: 08452 30 40 30
Fax: 08452 30 50 30

E-mail: info@labunlimited.co.uk
Web: www.labunlimited.co.uk

CHAMBERS AND GLOVE BOXES

Controlled Atmosphere (Anaerobic Chamber) for Multiple Operators

Our #855-ACB contains all the features of our single operator unit, but it has more capacity. It is ideal for two or more operators working together up to a maximum of four (4) people. Two people each side. NOTE: The maximum working pressure is 6" of WC.

The Drying Train Function.

The drying train includes its own vacuum pressure pump and six (6) polycarbonate canisters filled with Molecular Sieve™. The canisters are attached in series on the top and back of the unit. All canisters are connected using self sealing quick disconnects so as not to disturb the inner atmosphere when recharging them.

The Molecular Sieve™ acts as an atmosphere purifying medium. Most impurities produced by research will adhere to the granules. It also acts as a drying agent as moisture is produced. As moisture is absorbed, the Molecular Sieve™ will turn color to a dark brown.

The Molecular Sieve™ can be rejuvenated by heating in a hot oven for three (3) hours at 450° F. NOTE: You must remove the Molecular Sieve™ from the plastic canisters before recharging (baking).

What's included with the glove box:

- Two (2) pairs of white ambidextrous Hypalon gloves.
- Two (2) vacuum pressure pumps. One each for the drying train and the transfer chamber purging cycle.
- Two (2) Catalyst Heaters and four (4) Palladium canisters.
- Manual controls for purging, lights, and drying train operation.
- A "Bright Light" illumination system with a 40,000 hour lamp guarantee.
- Hospital grade multiple electric outlet (socket) strip.
- Optically clear plastic top and bottom sections with "Easy Clean" corners.
- Transfer chamber size 12" long X 11" I.D. (305 mm X 280 mm I.D).
- Two year (24 month) standard warranty (Not gloves or consumables).



855-ACB, Anaerobic Chamber for Multiple Operators

855-ACB/Exp, Export Model

Product Data	855-AC	855-ACB
I.D.	41" w x 28" d x 26" h 1,040mm x 710mm x 660mm h	60" w x 38" d x 31" h 1,520mm x 960mm x 790mm
O.D. (Includes transfer chamber (12" long)	55" w x 35" d x 38" h 1,400mm x 890mm x 970mm	76" w x 47" d x 42" h 1,930mm x 1,190mm x 1,070mm
Approximate Volume	17.3 Cubic Feet 489 Liters	40.9 Cubic Feet 1,157 Liters
Approximate Shipping Weight (Crated)	450 Pounds 205 Kilos	685 Pounds 311 Kilos

800-ONEG, Oxygen reducing accessory not included

This accessory further reduces the trace amounts of Oxygen remaining in the glove box after initial purging. Part #1 is the Oxygen trap. Part #2 is the Oxygen indicator (sensor).

The accessory is attached only after the initial purge cycles have been completed. It will reduce trace amounts of Oxygen down to about ten (10) ppb.

