BRICK
Technical Data

Control Range	Flow : 3-120 slph CO_2 : 1-15 % O_2 : 0.5-25 % *(optional)* O_2 : 2-60 % *(optional)*
Sensors	Flow : thermal mass flow CO_2 : IR-spectroscopic with pressure compensation O_2 : zirconia solid electrolyte
Input	Air : 0.8-1 bar CO_2 : 5-7 bar* O_2 : 5-7 bar* N_2 : 5-7 bar* *lower pressure input available
Timer	Programmable shut-off up to 99 hrs.
Communication	RS 232C serial interface
Voltage	12 VDC, 90-250 VAC power supply included
Consumption	40 W max.
Compatibility	Upgrade for all CUBE&BOX temperature control systems
Options	O_2 regulation Auxiliary output

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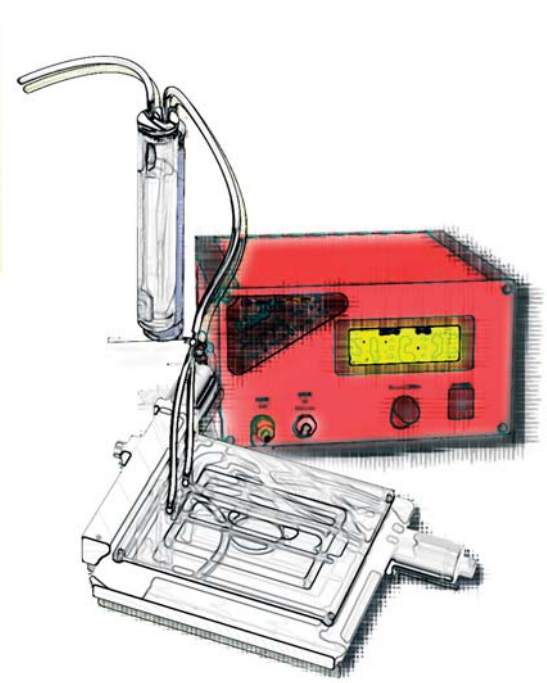
LIFE IMAGING SERVICES

BRICK & Co.



Gas & Humidity Control for Live Imaging

Specimens in bicarbonate-containing culture media in contact with a gas phase must be kept under the correct CO_2 concentration to prevent loss of bicarbonate and the resulting basification of the medium.

CO_2, (and O_2) Regulation

The BRICK offers a convenient and flexible means to mix air and CO_2 to the required concentration and flow. O_2 regulation is available optionally if your experiments require a non-standard oxygen level.

Humidification of the gas is required to prevent evaporation of water from the culture medium and the resulting rise in osmolarity.

The humidifier column is mounted in the BOX (temperature-controlled microscope enclosure)

Evaporation Control

and filled with distilled water. The gas is warmed up and humidified by bubbling it through a micro-filter candle.

Exposing the entire microscope to high humidity may result in damage to electronics, optics, and mechanics. This necessitates the use of stage-top incubators to restrict the humid gas to the sample area. Stage-top incubators are designed specifically for different types of microscopes stages, sample formats and applications. Closed stage incubators

Stage-Top Incubation

have low gas consumption and can also be used for large sample formats such as standard multi-well plates.

Semi-open stage-top incubators allow access to the

specimen,

e.g. for microinjection or electro-physiology.