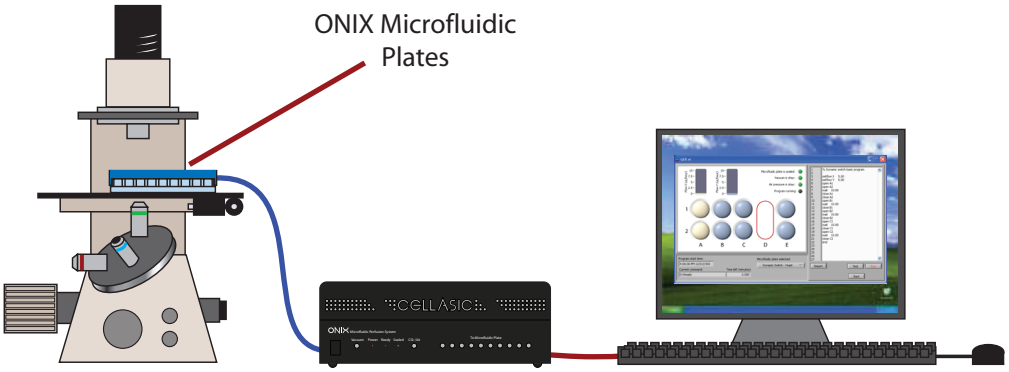
ONIX™ Microfluidic Perfusion System

Live cell imaging made simple. The ONIX™ enhances cell culture quality with advanced microfluidic perfusion technology. The system works with your microscope to provide a total solution for capturing the highest quality data with minimal effort.



The ONIX Advantage

- High quality temp/CO_2/media flow control at a fraction of the cost of competing systems
- Stable culture environment for live cell experiments up to 5 days on the microscope
- Real-time monitoring of cellular responses to media solution switching

ONIX System

The system integrates all the components necessary to culture cells on your microscope stage. Innovative microincubation method maintains temperature and CO_2 to optimize cell health during long term experiments. Software controls media perfusion to your cells during imaging.

ONIX Microfluidic Plates

Microfluidic cell culture plates provide a highly stable cell environment for unprecedented cell culture quality. Plates are specifically designed for high magnifcation time-lapse imaging. Cells and media are pipetted directly into the wells of the plate, making setup and operation simple.

www.cellasic.com
info@cellasic.com
Toll Free: 866.316.1259

Technical Specs

Microfluidic Perfusion System
Pressure Output: 0-10 PSI ± 0.02
8 Pressure Channels
Power Input: 110-240V
USB Data Connection
Built-in Pressure/Vacuum Pumps
Operated via FG Software

CO_2: Preset at 5%, Adjustable 0-15% ± 0.2
CO_2 Input: 15 PSI
CO_2 Consumption: ~ 1 mL/min

Weight: 9.56 lbs.
Dimensions:
310mm (L), 257mm (W), 113mm (H)

Temperature Controller
Uses Bioptechs Objective Heater
Objective Diameters: 14mm to 35mm
Sensor Type: Thermistor
Temperature Range: Ambient to 43°C
Power Consumption: 1.3 Watt
Temperature Stability: ± 0.2°C

Microfluidic Plates
Fits standard 96-well plate stage holders
Imaging Surface: #1.5 glass coverslip
Uninterrupted Culture Time: 0-5 days
Perfusion Flowrate: 0.2-10 µL/hr
Chamber Volume: 80 nL
Input Volume: 350 µL per well
For inverted microscopes only

FG Software
Computer Requirements:
Windows XP, 2000, Vista Compatible
USB 1.0 Connection or higher
Pentium III-Class PC (500 MHz or higher)

Features and Benefits

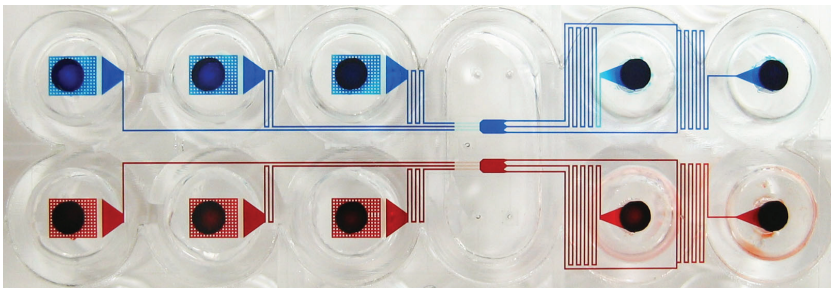
Integrates with your Microscope: Fit to any inverted microscope to create a live cell imaging station complete with temperature and CO_2 control.

Microfluidic Cell Culture: Proprietary microfluidic chamber and precision laminar flow creates a highly stable cell environment.

Multiplexed Culture Chambers: Independent flow chambers allow 2 simultaneous experiments on one plate.

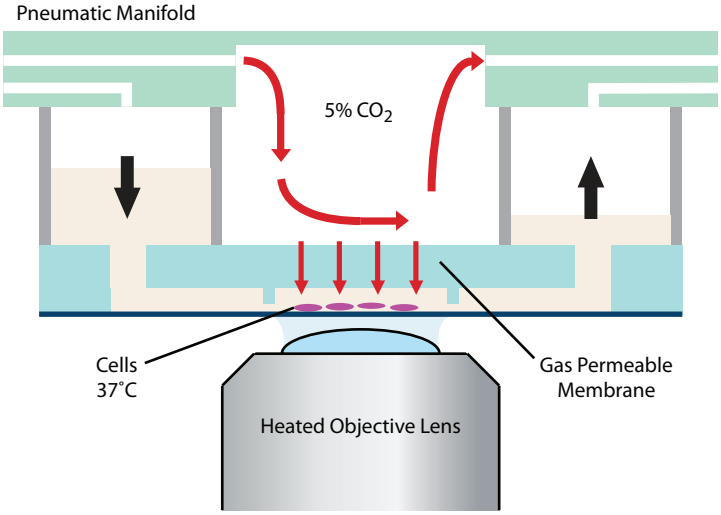
Pressure Driven Flow: Eliminates setup time while delivering more accurate flow control compared to typical syringe pumps.

Microscale Flow Control: Software interface allows you to program solution exposures and change media solutions in real-time during an experiment.



Advanced microfluidic cell culture design

Microincubation Method



Super-efficient microincubator design maintains precise temperature and CO_2 for cell culture on the microscope stage.