Zoë-CM2™ Culture Module

Zoë sustains the life of cells within Emulate Organ-Chips by automating the precise microphysiological conditions needed to culture up to 12 chips. As an open platform, Zoë enables researchers to build a wide variety of organ models for myriad applications—from disease modeling, to target validation, to drug candidate safety and efficacy evaluation.



Key Functionality

Seamless Interface

Avoid complex, manual, and error-prone syringe pump and tubing setups with an integrated platform.

Media Flow

Independently control the flow rate in each channel or establish an air-liquid interface, depending on experimental needs.

Cyclic Stretch

Adjust the frequency and strain of cyclic stretch to recreate the mechanical forces of breathing or peristalsis.

Bubble Reduction

Overcome a point of failure common in other microphysiological systems with the proprietary Regulate™ Cycle

Auditable Data Log

Easily audit historical pressure and stretch performance with automatically generated data logs.

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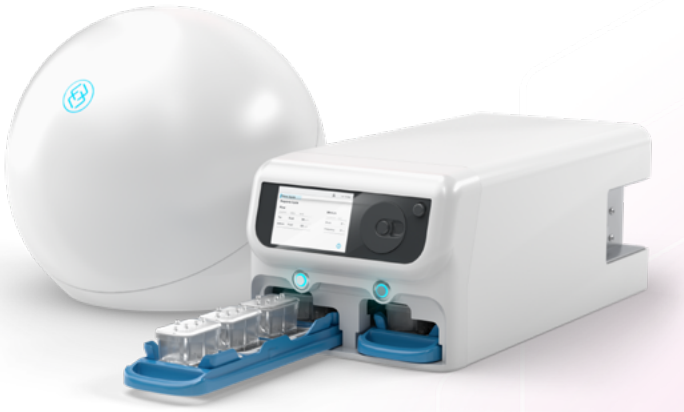
A Complete Organ-Chip Platform



The Zoë-CM2 Culture Module is a complete Organ-on-a-Chip solution that provides the dynamic culture conditions needed to culture up to 12 Organ-Chgips per Zoë.

Zoë is designed to make Organ-on-a-Chip technology reliable and accessible for researchers of any experience level, enabling more reproducible, physiologically relevant studies across a variety of organ models and applications.

Zoë-CM2 Specifications:

General

Overall Size	178 x 218 x 429 mm (7.0" x 8.6" x 16.9")
Weight	10.9 kg (24 lbs)
Power Consumption	13W

Operating Requirements

Instrument Rating	24 VDC, 3.5 A, 50-60 Hz
Gas Input Pressure	276 kPa + / - 35 (40 psig + / - 5)
Gas Input Composition	100% CO_2
Vacuum Input Pressure	-70 kPa (-10.2 psig), minimum

Environmental

Operating Temperature	20-38 °C
Relative Humidity	0-95%
Max Altitude	2,000 meters
Flow Range	0 µL / h, or 10–1,000 µL / h +/- 15%*
Stretch Range	0-12%
Stretch Frequency	0.0-0.40 Hz

*Flow tolerances may vary. Tolerance is based on Zoë-CM2 with firmware 1.3.0 or above. For Chip-R1, the bottom channel maximum flow rate is 2,000 µL / h.

To learn more and order, visit emulatebio.com/zoe

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