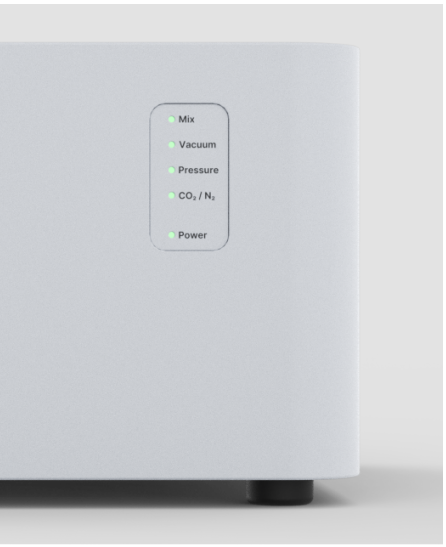
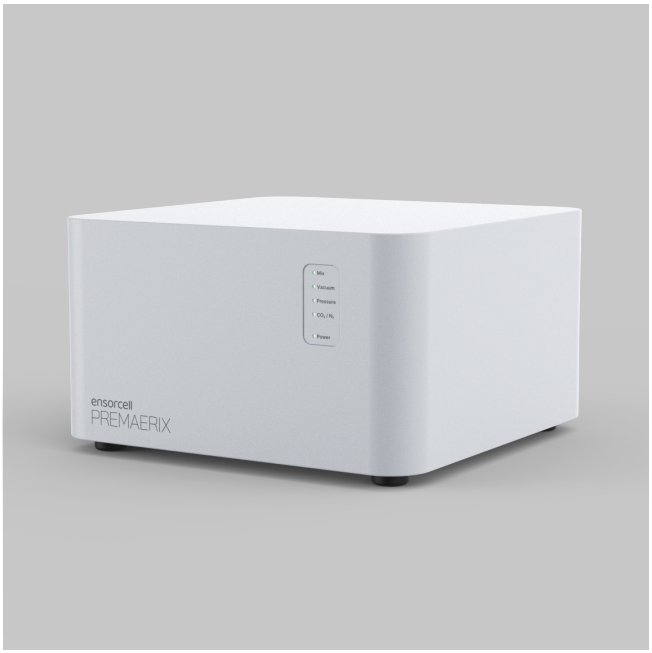
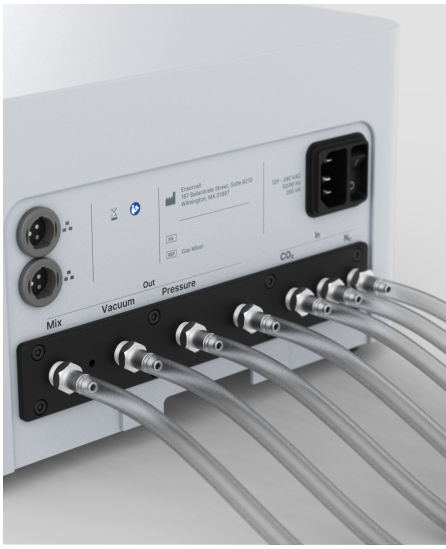
ensorcell
PREMAERIX™

ensorcell.bio/premaerix
info@ensorcell.bio







Laboratory gas mixers

Laboratory gas mixers blend ambient air with pure bottled gas to create customized mixtures while reducing gas consumption. Conventional systems can require air compressors, mass flow controllers, and moisture management components. Microfluidic applications present challenges at extremely low or variable flow rates, where traditional equipment can sometimes become complex and unreliable.

The Ensorcell™ solution

The Premaerix™ Gas Mixer leverages patent-pending technology to solve precision gas concentration challenges across all flow rates, including flow at true zero. This cost-effective, dependable, and durable system provides consistent accuracy in a quiet, compact form factor. Key components include a high-performance, near-silent air compressor and advanced water collection system. Its architecture integrates two subsystems—the primary gas mixing unit and a touch-screen interface with optional external display—linked via CAN bus protocol with API access for alternative control methods.

Precise
Deliver accurate gas concentrations across flow rates, including zero.

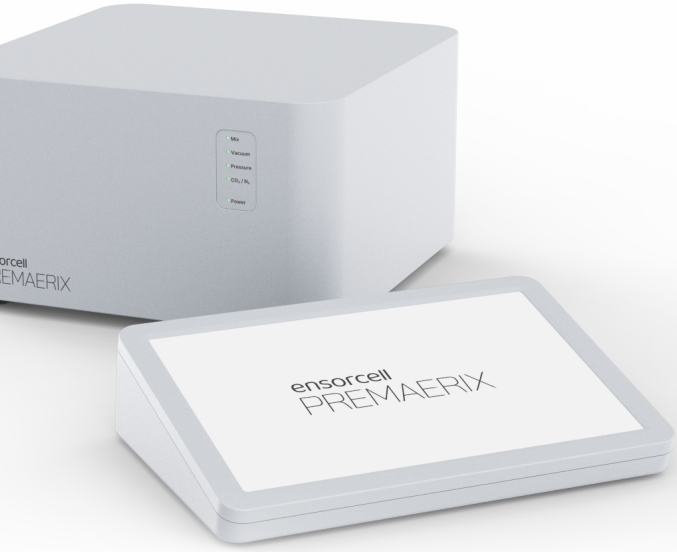
Quiet
Blend seamlessly into lab setups and work quietly with discreet mixing.

Reliable
Minimize reliance on premixed gas cylinders.

Safe
Work safely with a built-in 0.4-micron hydrophobic filter for IEC 61010-1 2017 compliance.

Compact
Save space in crowded labs and countertops.

Affordable
Expertly engineered to deliver maximum cost efficiency.



Filtration

All inputs and outputs feature a user-serviceable 0.4-micron hydrophobic filter membrane.

Safety compliance

The mixer system meets IEC 61010-1 2017 standards, ensuring it qualifies for NRTL and CE safety certifications.

Condensate tray

A water collection system expels condensed humidity, re-evaporating it from the condensed tray for continuous operation without the need for active draining.

Contact

info@ensorcell.bio

Visit **ensorcell.bio/premaerix** to learn more.

INPUTS	
Power	100 - 240 VAC, 50/60 Hz
CO_2 (100%)	40 - 125 psig
Air alternative gas (pre-mix)	40 - 45 psig
Communication protocol	CAN bus
OUTPUTS	
1: Adjustable pressure/vacuum	-5 to 5 psig +/- 0.25% F.S.
2: Adjustable pressure/vacuum	-5 to 5 psig +/- 0.25% F.S.
3: Adjustable pressure	0 to 5 psig +/- 0.25% F.S.
4: Adjustable pressure	0 to 5 psig +/- 0.25% F.S.
5: Fixed 5 psig (air or pre-mix only)	5 psig +/- 0.1 psig
Output gas concentration (CO_2/Air)	0 to 10% CO_2 +/- 0.1%
Flow rate, maximum (total)	300 SCCM
Flow rate, minimum	0 SCCM
MECHANICAL	
Gas mixer size	10.3" W x 10.3" L x 5.9" H
Gas mixer weight	20 lb
Gas mixer noise	< 45 dB
HMI screen	10.1", IPS, 1280 x 800
HMI size	9.6" W x 6.9" L x 2.4" H
HMI weight	2.2 lb

Specifications subject to change. Performance characteristics may vary based on application and operating conditions. Products are intended for research use only and are not intended for diagnostic, therapeutic, or clinical applications.