

LePhinix[®] EZG Benchtop Bioreactor

Benchtop bioreactors are widely used in the upstream process of biological products, which are suitable for high-throughput development and culture process optimization, and parallel screening of experimental parameters.

With advanced design of the control system, the system can be configured quickly for different applications. Improve the efficiency of biological culture experiments, with flexible configurations, easy operation and lower cost. Space saving with compact design, perfect collection of all parameter detection and control units.



Typical applications

LePhinix[®] EZG benchtop bioreactor is suitable for CHO, 293, SF9, Vero, E.coli, Pichia and other cells. It has been successfully applied to a variety of cell types, including CHO cells, HEK293, SF-9 and other cells.

Advantage

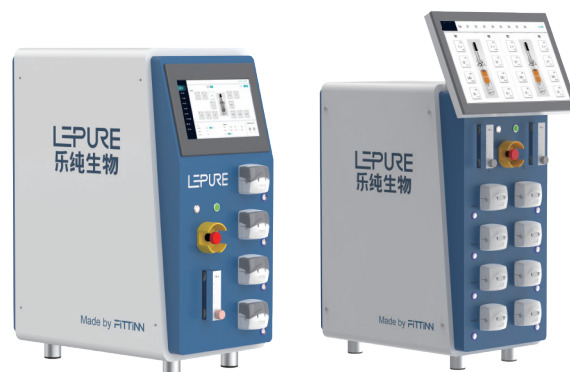
- ◎ Intelligent process management and data analysis software
- ◎ Comply with 21 CFR PRAT 11, GAMP5 and cGMP
- ◎ Open configuration platform to provide customization solutions
- ◎ Multi tank controllable.
- ◎ Comes with integrity test function.

Specification

There are two types of LePhinix[®] benchtop bioreactors: LePhinix[®] EZG series and LePhinix[®] EZG Pro series.

◎ LePhinix[®] EZG/EZG M Series

LePhinix[®] EZG laboratory standard bioreactor. Friendly interface, easy control and operation; It meets the basic requirement in cell culture and fermentation process. Standard control unit to monitor and control stirring, temperature, pH, DO, liquid level and other parameters. Cultivation temperature is controlled by electric heating blanket and cooling rod, with built-in correction and correlation functions, quick setting and operation.



LePhinix® EZG Pro Series

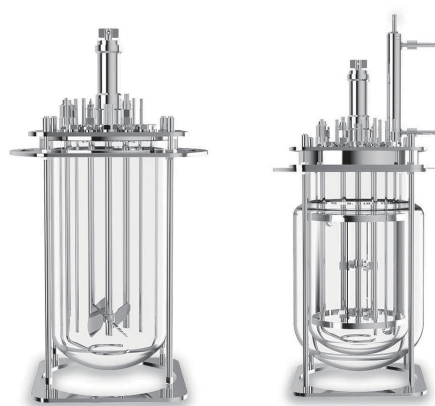
LePhinix® EZG Pro series bioreactors are suitable for large-throughput parameter development and culture process optimization, and for parallel screening of experimental parameters.

With advanced design of the control system, the system can be configured quickly for different applications. Improve the efficiency of biological culture experiments, with flexible configurations, easy operation and lower cost. Space saving with compact design, perfect collection of all parameter detection and control units.



tank

The function and structure of the tank are designed according to the experiment requirement with excellent design concepts, so as to better help experimenters. Tank are available in 2L/5L/10L. Standard tank lids connections can meet the customization needs of different experiments. All parts of the lid in contact with the liquid in the tank are made of high-quality 316L stainless steel, mirror-polished and electrical polished.



Technical specification

LePhinix® EZG Benchtop Bioreactor Parameters

Mixing System	
Type	Internal mechanical stirring / intelligent servo brushless motor
Speed	0 – 300 rpm (Cell) / 0 – 1000 rpm (fermentation)
Temperature Control	
Type	Electric heating blanket (single layer) / water bath heating (Jacket)
Sensors	
Temperature	Pt100, class A, 0 – 60 °C, dedicated cable
pH	Smart combination electrode, PG13.5 interface, 2 – 12, dedicated cable
DO	Intelligent optical oxygen electrode, PG13.5 interface, 0 – 200%, dedicated cable
Liquid Level	Resistive, special cable
Gas control	
Type	Surface ventilation/deep ventilation
Gas	Air, O ₂ , CO ₂ , N ₂
Control	1 rotameter, up to 4 mass flow meters (MFC)
Sparge	Annular macrobubble/ microbubble
Exhaust	Reflux condenser (optional)

Peristaltic pump	
Quantity	4 adjustable speed pumps
Rotating speed	0-150rpm
Control System	
Controller	Industrial PLC
HMI 10"touch screen	10 "touch screen
Utility	
Power supply	220V, 50Hz
Gas	2 bar, dry, particle-free, oil-free
Cooling water	1 bar

LePhinix® EZG Pro Benchtop Bioreactor Parameters

Mixing System	
Type	Internal mechanical stirring / intelligent servo brushless motor
Speed	0 – 300 rpm (cell) / 0 – 1000 rpm (fermentation)
Temperature Control	
Type	Electric heating blanket (single layer) / water bath heating (Jacket)
Sensors	
Temperature	Pt100, class A, 0 – 60 °C, dedicated cable
pH	Smart combination electrode, PG13.5 interface, 2 – 12, dedicated cable
DO	Intelligent optical oxygen electrode, PG13.5 interface, 0 – 200%, dedicated cable
Liquid Level	Resistive, special cable
other	Third-party data integration
Gas control	
Type	Surface ventilation/deep ventilation
Gas	Air, O ₂ , CO ₂ , N ₂
Control	Most Mass Flowmeter (MFC)
Sparge	Annular macrobubble/ microbubble
Exhaust	Reflux condenser (optional)
Peristaltic pump	
Quantity	4 speed-regulating pumps, which can be externally connected to 2 independent peristaltic pumps
Rotating speed	0-150rpm
Control System	
Controller	Industrial PLC
HMI 10"touch screen	23 " all-in-one PC
Utility	
Power supply	220V, 50Hz
Gas	2 bar, dry, particle-free, oil-free
Cooling water	1 bar

Tank

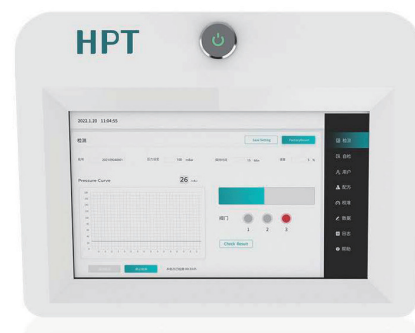
Tank				
Volume	3 L	7.5 L	15 L	
working volume	2 L	5 L	10 L	
material	Perborosilicate			
Lid				
interface	6 个M18	7 个M18	8 个M18	9 个M18
	9 个10mm	10 个10mm	10 个10mm	9 个10mm
	1 个M27	1 个M27	1 个M27	1 个M27
material	SS316L			

Integrity tester

During the cultivation process, it is necessary to maintain sterile environment. The integrity test of the cultivation vessel is necessary to ensure the cultivation process. The culture vessel is integrity-tested to ensure correct installation and integrity of components within the culture vessel.

The integrity tester is portable, easy to use, and automatic, to complete the integrity testing of the culture container accurately and reliably. A simple and intuitive user experience, flexible configuration, perfectly fit the process needs.

- High-definition, large color touch screen design. Compact size, friendly interface, easy operation
- New circuit design and digital sensor technology promise the accuracy and reproducibility of test results
- Recipe is convenient for users to operate and accelerates the testing ability
- Real-time display of detailed test data and curves, monitoring the whole process of testing
- Record printing and storage management, comply to GMP
- Storage disk is integrated, which can save 100,000 records
- Management authorization function, with electronic signature
- Bilingual available in Chinese and English



Service

[User Manual](#)
[Validation Documents](#)
[Technical Support](#)

In order to obtain the best user experience, LePure Biotech can provide full service with the installation team, validation team and maintenance team

Besides life cycle support, SAT, installation and commissioning , IQ/OQ and other services, we also provide customized services.

We provide a full range of services to ensure products are in qualified condition and in compliance with regulatory requirement.

LePure Biotech implant a strict supplier quality management process, from design to delivery, to ensure our products in a qualified state and in compliance with regulatory requirement.

Ordering information

Volume	EZG Pro	EZG Pro Twins	EZG	EZG Twins	EZG M (microorganisms)	integrity tester
2L	CCAS02S	CCAT02S	CCBS02S	CCAT02S	CMBS02S	CIBSXXS
5L	CCAS05S	CCAT05S	CCBS05S	CCAT05S	CMBS05S	
10L	CCAS10S	CCAT10S	CCBS10S	CCAT10S	CMBS10S	