

Products for Upstream Process Development



Solve the upstream
puzzle now





Roche CustomBiotech
Cedex Bio® / Cedex BioHT®

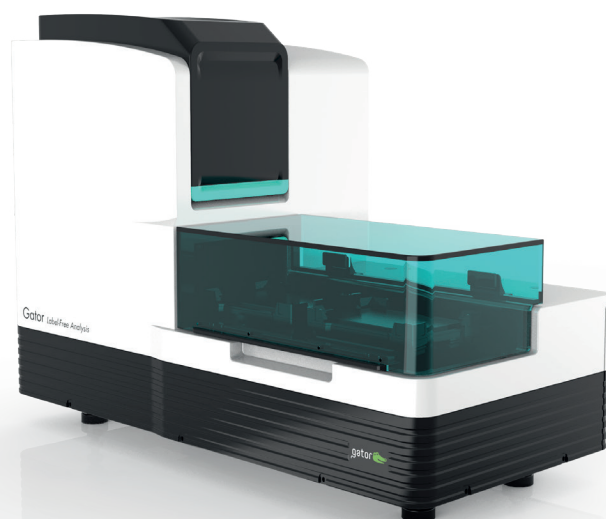
Automated Bioprocess Analyzer

The Cedex® multianalyzer instruments were designed for monitoring bioprocesses and fermentations. The wide range of measurable parameters allows the use of the Cedex Bio®/Bio HT® not only for production monitoring but also for the development and optimization of growth conditions for mammalian, bacteria and yeast culture systems. The analysis of substrates, metabolites and products are measured photometric. Solutions are available for both benchtop and high sample throughput with a total capacity of up to 126 samples. The Cedex® family offers a high comparability of results between different instruments. The multianalyzers can be easily integrated into GMP-validated biopharmaceutical production processes and meets GMP regulations such as 21 CFR Part 11.

Roche CustomBiotech
Cedex HiRes®

Cell Counter

The Cedex HiRes® Analyzer is a cell counter with high-resolution, scanner-based imaging that provides deep insight into changes in your cell culture. In addition to classical values, morphological parameters are recorded. Moreover, developments over time and growth rates as well as doubling times are determined. In combination with the Cedex Bio HT®, the Cedex HiRes® can be integrated into fully automated process systems. The Cedex HiRes® can be used in GMP-validated biopharmaceutical production processes and complies with GMP regulations such as 21 CFR Part 11.



Gator Bio Inc.
Gator Systems

Biolayer interferometry analysis system

Gator™ systems are label-free analysis instruments based on next-gen biolayer interferometry (BLI) technology. BLI detects biomolecular interactions by immersing biosensing probes in samples. Gator™ probes are micro glass rods with the distal ends coated with proprietary optical layers and surface chemistries. The ease of use, versatility, flexibility, and throughput of Gator™ systems have enabled many applications in therapeutic development, manufacturing and life science research.

Monitoring of viable biomass

The FUTURA range reflects the latest generation of ABER's proven and widely accepted technology to measure viable biomass inside of your bioreactor in real-time. The capacitance-based reading allows for continuous monitoring of the culture inside of your bioreactor and therefore it allows to collect more data and gain a better understanding of your process. Given these features FUTURA is the perfect tool to be implemented in automated feed strategies. New to the FUTURA family is the FUTURA pico. It was specifically designed to fit in small scale bioreactors. Thus, enabling viable biomass measurements in earlier stages of process development.



FlowNamics
SegFlow S3

Automated sampling and analysis 24/7

The SegFlow S3 is an automatic sampling system for up to 8 vessels or process stream connections, which sends the sample to analyzers like the FLEX2®, CEDEX Bio HT®, Vi-CELL®, CEDEX HiRes®, YSI® Analyzers, HPLC, Kaiser RamanRxn2® and the Flow Fraction sample collector. It standardizes the sampling process, allows sampling 24/7, saves work time and can provide and transfer measured sample values to process controllers in real time. It has a smart flow control and reagent status reliability, improved operator interface and pinpoint accuracy. SCADA Integration, feed control options and variable communication interfaces are state of art here.

Parker
MabTec®

Cell retention via TFF

The MabTec® is a fully automated system for gravimetric bioreactor additions and the control of perfusion processes via TFF. Used as a feeding or inoculation pump, the MabTec® can communicate with one or two balances to control corresponding additions. Thus, a weight or volume controlled addition can be run with an accuracy of $\pm 0.5\%$. In the context of TFF-based perfusion processes, it serves as a recirculation and/or filtrate pump. In combination with the SciPres® sensors, control is possible by constant pressure or constant flow rate. The MabTec® is a benchtop device; it is space saving and transportable. It is compatible with any type of bioreactor from laboratory to production scale and allows flow rates from 0.03 to 2258 mL/min.



NanoCollect® Biomedical Inc.
WOLF® Cell Sorter

Gentle benchtop sorting for healthy cells

The NanoCollect WOLF® is a microfluidic-based cell sorter for benchtop use which you can also place into a sterile tissue culture hood. Robust 488 nm laser detection and forward/back scatter enables sample analysis with up to 5 optical parameters. With its patented piezo actuator and low sorting pressure (<2 psi), cells can be very gently bulk sorted into tubes in a 2-way manner. Downstream processing options are extended by the optional N1 Single Cell Dispenser that allows single cell dispensing into 96- or 384-well plates. Cross contamination and sample carryover are eliminated through the use of sterile and disposable fluidics. Use of low sorting pressure greatly improves post-sort cell viability and significantly increases the number of colonies; making the WOLF® effective in sample preparation and cloning. With the new WOLF G2 Nanocollect now combines a 2-laser system in 3 different configurations (405/488 nm, 488/561 nm and 488/637 nm) and up to 9 fluorescence channels with the known advantages of gentle cell sorting from the WOLF.



GMP-compliant multisample Osmometer

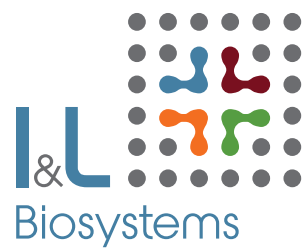
The OsmoTECH® PRO from Advanced Instruments is the only multi-sample osmometer designed to support 21 CFR Part 11 compliance. It is an accurate, precise and easy to use osmometer that incorporates freezing point depression technology to test osmolality – an essential parameter for process control and QC. With a sample volume of only 30 µL, the osmolality can be determined serially within 90 seconds in the 20-position carousel. Flexible data management options as OPC, embedded web server, direct file transfer to a network folder and TCP/IP communication are able to quickly transfer data from the device into your workflow. This instrument provides a fast, accurate, and flexible method to check and monitor your bioprocess. The OsmoTECH® PRO is factory calibrated and ready to test.



Erbri Biosystems
Breez™

True Perfusion™ 2 mL microbioreactor system

Imagine having more control, increased insights, and all the performance of benchtop bioreactors – with fewer people and less space requirements. Meet the Erbri Breez™ from Erbri Biosystems, for intensified and continuous culture processes in single-use 2 mL microbioreactors. It is the only mL-scale platform on the market that offers a fully automated, continuous True Perfusion™ culture. So, you can do everything you're doing with a traditional bioreactor and more because you'll get better control, the ability to easily run multiple experiments at once, and get more data. With the same number of people, the Erbri Breez system delivers 7-9 times more process development throughput than a 2L reactor, for less cost.



I&L Biosystems GmbH
Königswinterer Straße 409
53639 Königswinter • Germany
Tel.: +49 2223 9192-0
Fax: +49 2223 9192-48
info@il-biosystems.de
www.il-biosystems.com

Present across Europe