OpenBIO MAX

Tablet Controlled Large Scale Bioreactor

2018 PHARMA INNOVATION AWARDS
PHARMACEUTICAL MANUFACTURING

Panacea Technologies Inc.
automating your world

Innovation at a Glance

- Operators can view and control any fermenter from anywhere with a tablet, phone, or computer.
- Ethernet based architecture extends component lifecycles and increases external data collection options.
- Remote notification and alarm system informs staff of critical events even when they are off-site .
- Built with open sourced, non-proprietary components stocked locally by most distributors.
- Hardened Industrial components provide lifecycle longevity and fewer interruptions for repairs.
- Hybrid-cloud based architecture makes adding Bioreactors as easy as plugging in a network cable.

Command Your Process

- Automatic scheduled feeds based on weight and/or volumetric flow.
- Recipe driven software with ability to run customizable recipe formulas on any Bioreactor.
- Gas mixing assembly with headspace as well as micro and macro sparge additions.
- An abundant range of standard options for parameter control. For example with DO you have options including control through a combination of sparge, agitation, and headspace overlay.
- Automatic timed DO, pH, and temperature algorithm and set point shifts

The OpenBIO MAX platform from Panacea Technologies is designed to be the high functioning center piece of your laboratory and manufacturing operations. With features like a tablet based interface, extensive recipe options, and a remote notification system OpenBIO MAX will give you the flexibility, scalability, and reliability you expect from modern laboratory and manufacturing systems.

Whether your application requires a single Bioreactor or a campus of several hundred, configuration is straightforward and seamless as your requirements expand.

This innovative platform is built with standard hardware avoiding long part lead times and costly periods of downtime giving way to a more productive facility running more batches and collecting more data.
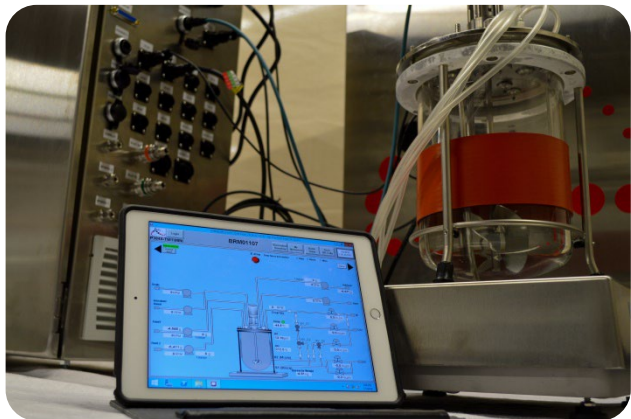
The OpenBIO MAX Formula Manager grants your process development team the ability to create any number of formulas linked to a master recipe from a central interface. This makes running concurrent batches with minor deviations as simple as the click of a button.

With turn-key delivery services, limitless system connectivity, and extended component lifecycles OpenBIO MAX is positioned for immediate deployment into most laboratory settings. For unique situations a design team is ready to begin the customization process to address your specific requirements. Discover the Panacea difference with OpenBIO MAX.

"An open platform for modern operations"

Unlike traditional platforms with a limited number of Bioreactors per central control station, OpenBIO MAX utilizes tablets (Windows, Android, or iOS) for control and batch interaction greatly increasing mobility for scientists and laboratory staff. Any fermenter can be viewed from every mobile control station. Scanning the unique QR code on each OpenBIO MAX station with the tablet control interface will grant access to that unit. The hybrid-cloud based architecture allows for remote experiment and batch notifications as well as secure remote access for scientists to make changes to critical batches remotely.
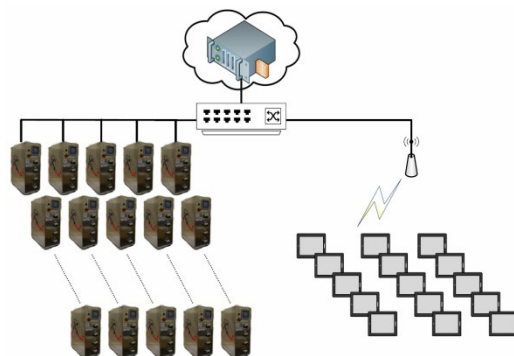
Scalability and Security by Design

The OpenBIO MAX platform was designed to be deployed on either an existing virtualized infrastructure (hybrid cloud) or an entirely new infrastructure depending on individual requirements. This deployment method allows for seamless expansion of both the tablet interfaces and Bioreactor units. It also enables centralized data collection and storage with a variety of backup options for security, regulatory concerns, and accessibility. Adding a Bioreactor unit is as simple as plugging it into the network, no additional components or configuration is needed.

Use of industrialized and secure wireless access points allows you to experience all the benefits of mobility without sacrificing security. The platform also allows for automatic disconnect of tablets when out of range of specific Bioreactor units or laboratory areas. Tablets can be monitored remotely for troubleshooting or Quality purposes.

Every OpenBIO MAX deployment comes standard with a one year activation license of the Panacea Update Manager which will deploy critical vendor qualified Microsoft patches to ensure your systems stay up to date and secure without impacting performance from patch compatibility issues.

This platform can be expanded cost effectively and with ease while ensuring your data is accessible and secure providing redundancy and fault tolerance. Whether your lab is static and unchanging or constantly growing, OpenBIO MAX is the clear choice.

OpenBIO MAX Features

- Spare Analog and Digital I/O connections allowing on demand customization
- High accuracy Temperature probe and Heating Jacket
- pH, Temperature, and Dissolved Oxygen transmitters
- Supports four to eight front mounted peristaltic pumps and multiple external pumps
- Supports four to eight weigh scales

- Up to Five MFCs with gas mixing assembly
- Ethernet based variable speed Agitator Motor
- Flexible pump and scale assignments
- Training and simulation station availability
- Turnkey system deployment including validation
- Yearly support contracts including instrument calibration

Panacea Technologies was founded in 1996 and remains committed to delivering Innovative products and services. Headquartered in Montgomeryville, Pennsylvania Panacea provides hardware, software, and services to clients globally. For information visit http://panaceatech.com/ or email sales@panaceatech.com to schedule a demo.