

Miniature and bench-scale Multi-Bioreactor systems



Left: **XPLORER** using ~ 100ml vessels for parallel operation (~ W 40cm x H 80cm x D 60cm)

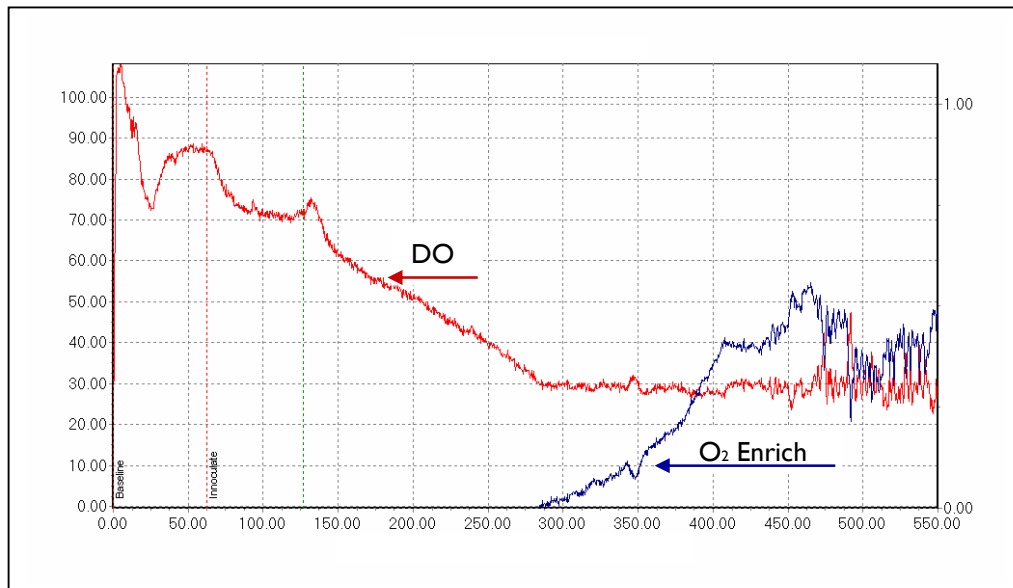
Below: **XPERT** bench-scale multi-bioreactor system (~ W 96cm x H 60cm x D 50cm)



- System is suitable for oxygen enrichment in mammalian systems, where the flow rates are typically less than 1 vvm
- Good control of $\text{pH} \geq 5$
- The blender is fully integrated in the bioreactor system, where the feedback from the dissolved oxygen probe and pH probe control the oxygen and carbon dioxide enrichment respectively

4-Gas Mixing

BioXplore offers a 4-gas mixing system, nitrogen, air, oxygen and carbon dioxide, for dissolved oxygen and pH control. The degree of gas enrichment is determined by the user via the software and is fully automated. Each gas enrichment system is able to control the dissolved oxygen and pH level in 4 parallel bioreactors, where the level of dissolved oxygen and pH is independently set.



*BioXplore 4-gas mixer used to control *Saccharomyces cerevisiae* fermentation, the software automatically enriches the air supply as the dissolved oxygen level reaches 30%, as set by the user*

BIOXPLORE

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