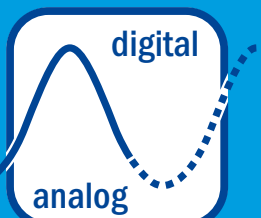


Take what you have



This is our concept of how you can create your very own customized and fully controlled bioreactor. You have an old culture vessel or your own fermenter design? - No problem!

NEW!



Read and control
analog devices

Your benefits:

- > Your choice of individual components
- > You are able to design a space effective assembling
- > You don't have to invest in new hardware
- > Don't pay for installation/integration of new digital devices
- > BlueVis 4.0 is compatible with other process-control software via OPC

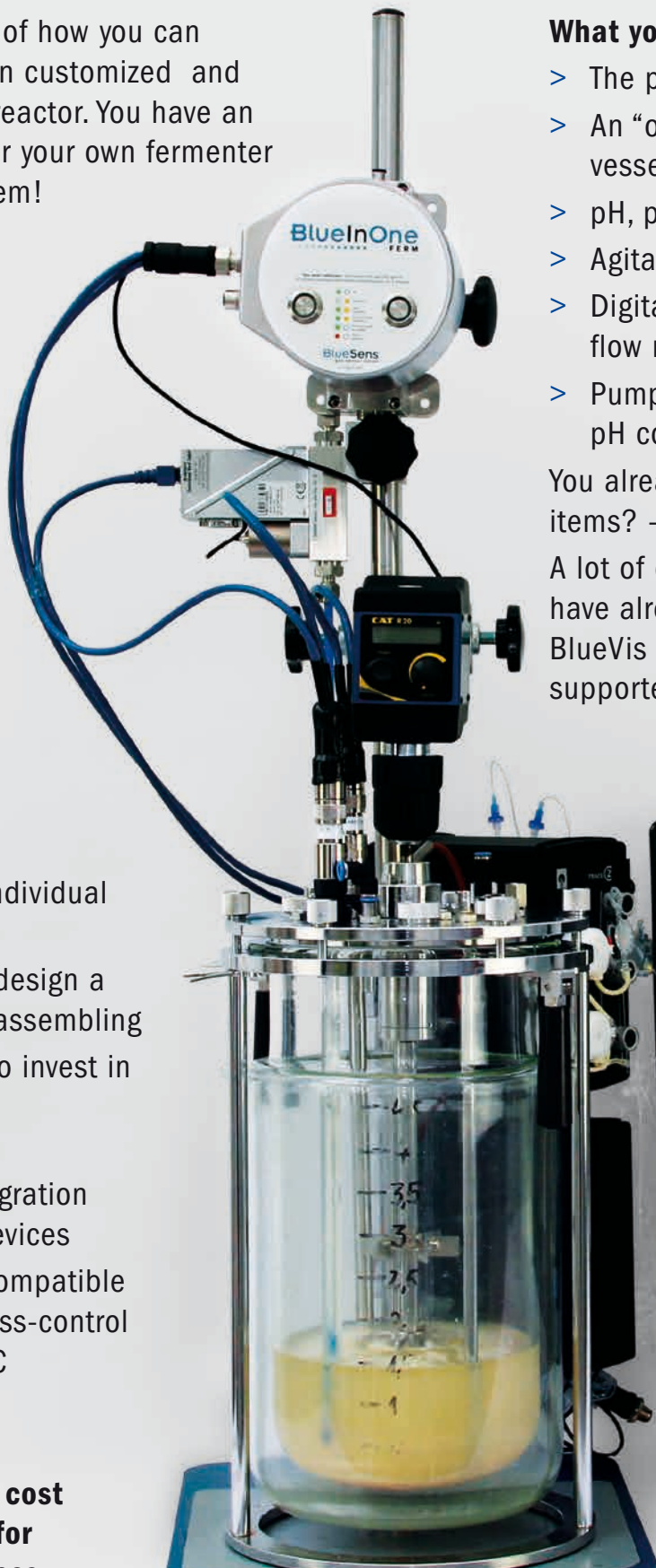
BlueVis 4.0 is THE cost effective solution for fermentation processes

What you need...

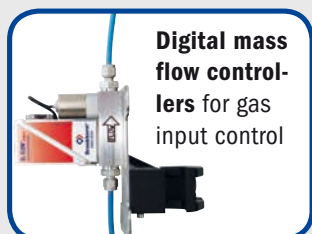
- > The process software BlueVis 4.0
- > An "old" culture vessel/bioreactor/fermenter
- > pH, pO2 probes
- > Agitator control
- > Digital mass flow controller or flow meter
- > Pumps for feed addition and pH control

You already have some of these items? - Perfect!

A lot of communication protocols have already been integrated in BlueVis 4.0. If your unit is not supported yet, we will realize it.



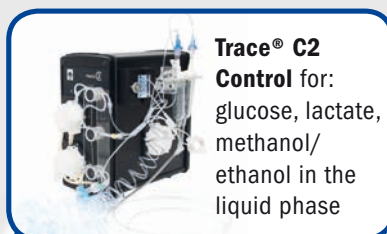
Use your equipment with



Digital mass flow controllers for gas input control



BlueInOne gas analyzer for monitoring exhaust gas: O_2 , CO_2



Trace® C2 Control for: glucose, lactate, methanol/ethanol in the liquid phase



Agitator control



Pumps for feeding and pH control

Integrated math sensors, connection to MATLAB via integrated OPC server/client



pH, DO, and other **probes** for liquid phase measurements



Most **fermenter vessels** and **heating/cooling systems**



One for all



BlueVis for monitoring, acquisition and integration of data from all components and for process control, the calculation of OUR, CER, RQ, growth rate and biomass.

