

# my-Control, color your lab

my-Control is the most advanced bioreactor controller for small scale bioreactors starting at 50ml (working volume). The system can control bioreactors up to a total volume of 3L. This versatile controller can be used for both cell culture and microbial cultures. The advanced software makes it possible to switch from microbial to cell culture configuration in seconds. With its footprint of only 19 by 35 cm (W x D) it uses the minimal amount of bench space, allowing to set up as many as 5 on 1 m width of bench space. The built-in a web server allows the my-Control to be operated by any computer with a web browser (Internet Explorer, Mozilla firefox, Apple Safari or Google chrome). Wireless devices like iPad, iPhone or android tablets or phones can also be used to operate my-Control. The selectable colored band on the unit allows the system to be personalized and to fit your laboratory.

## Features

- Control of all bioprocess parameters (including pH, temperature, dissolved oxygen, agitation, foam and level)
- Selectable autotuning adaptive PID control for accurate control when process conditions change during the culture.
- Easy operation through web browsers (Windows PC, Apple PC, Linux PC, iPhone, iPad, Android tablet, Android phone)
- Parallel processing is enhanced by allowing up to 32 my-Controllers in one human interface
- Extended liquid additions options tuned to small scale cultivation via up to 6 digital variable speed pumps or micro addition valves for extremely accurate nanoliter volumes
- Enhanced gas addition strategies via 3 mass flow controllers
- No water connections needed due to electrical cooling and heating system for bioreactor and condenser
- Expandable control system with optional extra inputs and outputs
- USB connection for optional balances Biomass or Fluorophor pH and DO sensors

## Applications

- Ideal for screening, media optimisation, modelling, toxicity studies etc
- Mini bioreactors
- Autoclavable bioreactors up to 3 liter volume
- Single Use Bioreactors up to 3 liter volume
- Microbial and Cell cultivation
- Batch, Fed-Batch, Perfusion and Continuous cultivation



## Specifications

<b>Inputs</b>	pH, temperature, dissolved oxygen, agitation, foam and level Optional: biomass and fluorophor pH and fluorophor dissolved oxygen Optional inputs 4 x analog in (0 – 10 V)
<b>Control type</b>	PID control with selectable autotuning adaptive control
<b>Actuators</b>	up to 6 digital variable speed pumps or micro addition valves for addition of extremely accurate nanoliter volumes up to 3 Mass Flow Controllers or 4 solenoid valves for gas flow control Electrical bioreactor heating via Peltier element or Heating Blanket Electrical bioreactor cooling via Peltier element Electrical condenser cooling via Peltier element Spare I/O: 8 x digital output, 4 x analog out (0/4 – 20 mA)
<b>Additional features</b>	Emergency stop connection, central alarm output, System status indication (inactive/active/alarm) by integrated colored light
<b>Power</b>	Pmax = 480 VA 115 / 230 Vac
<b>Dimensions (d x w x h)</b>	350 x 190 x 400 mm (D x W x H)
<b>Weight (kg)</b>	8.5 kg

