



# Flexible Dual Bioreactor Controller Adapts To Your Changing Needs

The Tezalon bioreactor controller is adaptable to fermentation and cell culture configurations. With a brand-agnostic design, you have the option to choose your own vessels or single-use bags, preferred sensors, automation and control platform.

## Future-proof your bioprocess

The Tezalon dual bioreactor controller is compatible with glass stir vessels up to 20L and rocking bioreactors with single-use bags up to 50L. With its flexible design, you have the option to use your own single-use bags or glass vessel (including the agitator motor adapters,) and your preferred sensors, whether Mettler Toledo, Broadley James, Hamilton, PreSens, or other.

Designed with state-of-the-art open architecture, the control system accommodates additional scales for vessel weight and additional sensors for perfusion applications. Controls are based on S88 standards to support manual operation to full batch control. And it can be delivered with DeltaV, Rockwell Automation, Inductive Automation Ignition, Wonderware, or other control system.

- Simultaneous control of two vessels
- Ideal for fermentation and cell culture vessel configurations
- Brand-agnostic design
- State-of-the-art automation based on S88 standards
- Flexible operation: manual to fully automated batch operations
- Easy access to agitator motor adapters accommodates various vessel/impeller manufacturers
- Up to 8 pumps for fluid management (4 for each bioreactor)
- Up to 8 mass flow controls for gas management (4 for each bioreactor)
- Durable stainless steel housing

### Technical Specifications

| Attribute              | Stir Vessel Configuration                                                      | Rocker Configuration                    |
|------------------------|--------------------------------------------------------------------------------|-----------------------------------------|
| Dimensions             | 24.8 x 24 x 12.6 in (H x D x W)                                                | 24.8 x 24 x 12.6 in (H x D x W)         |
| Operating Temp.        | 5 - 40°C                                                                       | 5 - 40°C                                |
| Relative Humidity      | 5 - 95%                                                                        | 5 - 95%                                 |
| Agitation              | Variable Speed Servo Motor with Agitator Blade Adapters                        | 2-40 RPM<br>2-12 Degree                 |
| pH / DO                | Mettler Toledo, Broadley James, Hamilton, Endress Hauser                       | preSens                                 |
| Temp                   | 100 Ohm RTD in thermowell                                                      | 100 Ohm RTD in thermowell               |
| Liquid Control         | 8x Cole Parmer Miniflex Variable (0-330 mL/min depending on tubing dimensions) |                                         |
| Temperature Control    | Heating Blanket; 3-way solenoid valve for chilled liquid, if applicable        | Tray heater; no cooling                 |
| Gas Control            | 8x MFC with direction control for overlay or sparge                            | 8x MFC with combined flow to rocker bag |
| Scale/Balance          | Not in base solution, but can add                                              | Not in base solution, but can add       |
| Antifoam               | Not in base solution, but can add                                              | Not in base solution, but can add       |
| Glass Vessels          | 1 - 20 L                                                                       | Not Applicable                          |
| Single-Use Vessels     | 1.3 - 14 L                                                                     | Not Applicable                          |
| Rocker Single-Use Bags | Not Applicable                                                                 | 10 - 50 L                               |
| Vent Filter Heater     | Not Applicable                                                                 | Yes                                     |

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