



BIOne 1250

High-Performance
and User-Friendly
Bioprocess Control

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The **BIOne 1250** is Modular, Flexible, and Highly Customizable, to Support the Most Nuanced Bioprocessing Requirements

The BIONe 1250 Bioprocess Controller, available in both single and dual configurations, combines sophisticated functionality with an intuitive, user-friendly interface to meet the demands of cell culture, cell free, and microbial fermentation applications. Designed for precision, it provides accurate control over agitation, temperature, pH, and dissolved oxygen, ensuring optimal process conditions. Additionally, the BIONe 1250 seamlessly integrates with advanced process analytical technologies, enabling real-time monitoring, data-driven optimization, and enhanced scalability.

RELIABLE CONTROL

The BIONe 1250 supports batch, fed-batch, and perfusion processes with single-use or autoclavable bioreactors, offering robust sensor integration, magnetic agitation, and precise temperature control.



CUSTOMIZABLE

Equipping scientists with open access, unlocked control loops, configurable PIDs, cascade visualization, and customizable recipes, the BIONe 1250 enables complete process development and optimization for even the most unique applications.



INTUITIVE INTERFACE

Engineered with an intuitive, ergonomic touchscreen, the BIONe 1250 offers the easiest to learn bioprocessing controller on the market, enabling quick mastery for both newcomers and experienced professionals alike.



Helping Science Improve Lives

Designed for Scientists, Engineered for Excellence

AGNOSTIC DESIGN ELEMENTS

The BOne 1250 controller operates a variety of stirred tank benchtop bioreactors, from Distek's 2L, 5L, and 10L single-use and autoclavable bioreactors to many third-party systems. Uniquely designed conversion kits allow seamless, rapid integration into any laboratory.

SOPHISTICATED STANDALONE SOFTWARE

The powerful subscription free BOne software and intuitive user interface come preloaded on every BOne 1250, offering robust control, data trending, configurable recipes, and automation. Optional OPC enables remote control via web browser, Python scripting, or SCADA.



FULLY CHARACTERIZED BIOPROCESSING SOLUTION

The BOne 1250 and vessels are well characterized based on tip speed, mixing time, P/V, OTR, and $k_L a$, simplifying the tech transfer and scale-up process. Distek's bioprocessing experts are always available to support your transition into a stirred-tank bioreactor or process development journey.

DISCOVER MORE ABOUT THE BOne 1250 CONTROLLER

For more information or to schedule an in-person or virtual demonstration, please contact our BOne team at bione@distekinc.com. We're dedicated to helping you explore the right bioprocess solutions.

BIOREACTOR INTERFACE	12.1" (30 cm) Capacitive touch screen	
REMOTE ACCESS	Remote viewing and control with optional OPC license	
DATA STORAGE	Over 30 days of local data storage & trending	
BIOREACTOR WORKING VOLUME RANGE	Autoclavable glass	0.75L - 10L
	Single-use	0.9L - 10L
AGITATION TYPE	Magnetic drive	
AGITATION RANGE	Autoclavable glass / SUF	15 - 1250 RPM up to 5L, 15 - 900 RPM in 10L
	Single-use bioreactor (SUB)	15 - 450 RPM
GAS CONTROL	Up to 5 configurable MFCs or Rotameters per side	
TEMPERATURE CONTROL	Autoclavable glass	4°C with chiller to 80°C
	Single-use	4°C with chiller to 60°C
TEMPERATURE RESOLUTION	0.1°C	
DO MEASUREMENT	Analog or optical	
DO CONTROL RANGE	0 - 200%	
pH MEASUREMENT	Analog or optical	
pH CONTROL RANGE	pH 2 - 12	
REDOX MEASUREMENT	Analog	
REDOX CONTROL RANGE	(-) 2000mV - (+) 2000mV	
PUMPS	4 variable speed pumps per side. Tubing range from 0.8mm ID to 6.4mm ID	