

Exclusive conversion bundles for existing BioFlo® 110/115 customers



Modernize your Lab

Save on your new BioFlo 120 by reusing your existing vessels

Keep your existing BioFlo 110 or 115 vessel kits and upgrade to the advanced BioFlo 120 bioreactor control system and gain one-year of warranty. Convert your legacy equipment now and benefit from our exclusive conversion bundles for existing BioFlo 110/115 customers.

- > Push-button Auto Culture modes for microbial and cell culture applications
- > Ready for the process: Unbox and installation within minutes
- > Automatic gas mixing algorithms for simplified control
- > Easy-of-use through pre-defined recipes
- > Universal connections for digital and analog sensors
- > Flexible operation with glass (up to 10 L) or BioBLU® Single-Use Vessels (up to 40 L)
- > Space-saving compact design for quick and easy installation
- > 1-year warranty on the new controller

For more details and order information on the advanced BioFlo 120 bioreactor control system, download our **Product Brochure** or visit: www.eppendorf.com/bioflo120

Unlimited Applications

- > Grow any cell type you can think of: Mammalian, stem cells, microbial, insect, plant cells, and fungi.
- > Unlimited process flexibility: Batch, fed-batch, continuous, or perfusion.
- > Supports high-density, micro-aerobic, and anaerobic fermentation, secreted products production, and process development for cell and gene therapy.

Connection for interchangeable direct- and magnetic-drive motors; magnetic-drive capable of clockwise and counterclockwise rotation for simplified impeller selection

Easy-to-read 7" integrated touchscreen monitor

IP21 rated enclosure for protection of sensitive electronics and cleanability

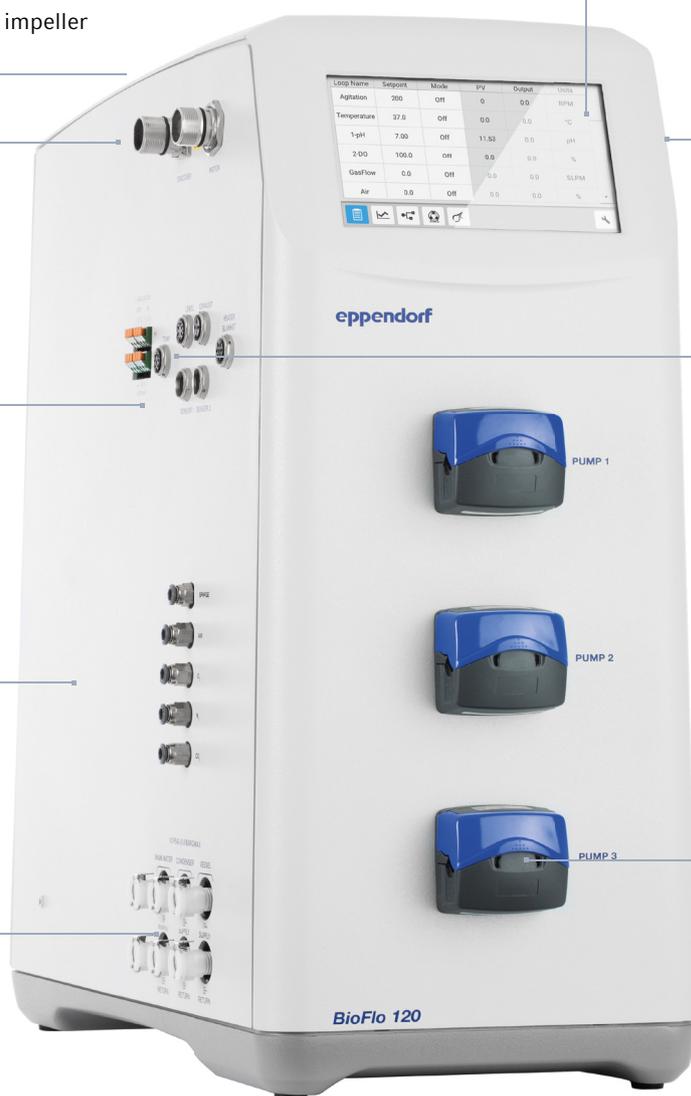
All vessel connections located on the side: Set up and ready to go in minutes

Three user-defined analog input/output connections. Select between 0-5V, 0-10V, and 4-20 mA depending on the device

High-precision thermal mass flow controller (TMFC) or rotameter for gas flow control. Standard automatic mixing of four independent sparge gas supplies

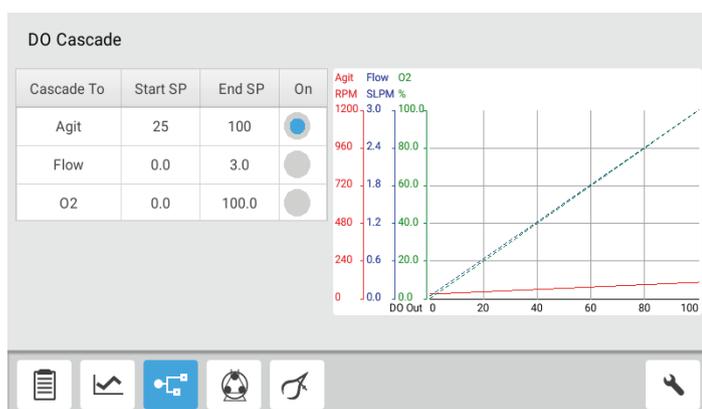
Water recirculation module provides precise temperature control and exhaust condensing

Three front-mounted fixed-speed pumps with industry-standard easy load pump heads for convenient liquid addition/removal

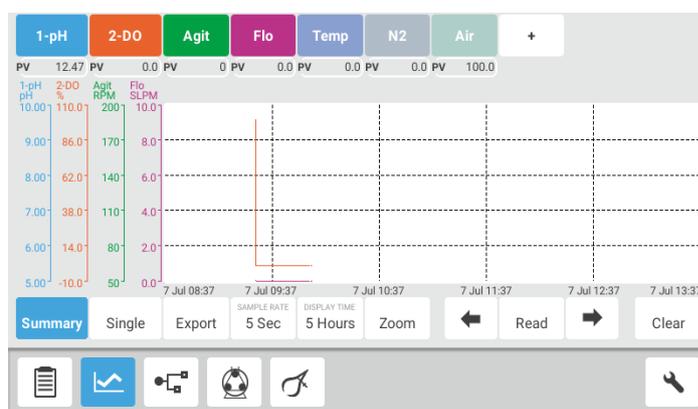


Sophisticated Software

- > Eppendorf Bioprocess Control Software offers real-time, local process control with an integrated touchscreen.
- > Speed up your process set-up with the intuitive and ease-of-use on-board software.
- > Optional Eppendorf SCADA platforms (BioCommand®, DASware®) provide high-level process control capabilities and secure database management.
- > IP networking provides remote access through PC or mobile devices.
- > Automatic gas mixing for simplified control.



> User-defined DO-cascade offers process flexibility.



> View your entire process with expanded trend screen.

Compare and Convert

Technical data	BioFlo® 120	BioFlo®/CelliGen® 115	BioFlo® 110
Single-use vessels	Expanded working range of 250 mL – 40 L (incl. BioBLU 1c/f)	Via adaptor kits: 1.75 L – 40 L (Bio-BLU 3c/f, 5p, 14c, 50c)	–
Sensors	pH, redox, CO ₂ , DO, Optical DO: analog and digital Mettler Toledo® ISM	pH and DO: analog only	pH and DO: analog only
Control software	Universal control strategy; Automated control modes (O ₂ /N ₂ , 3-gas, 4-gas)	Fermentation and cell culture modes; No automated gas mixing modes	Fermentation and cell culture modes; No automated gas mixing modes
1-touch process control	Auto Culture modes for microbial and cell culture applications	–	–
Agitation	Uni-directional direct drive Bi-directional magnetic drive Expanded agitation range*	Uni-directional direct and magnetic drives	Uni-directional direct and magnetic drives
Pumps	3x Watson-Marlow® easy load pumps (114DV)	3x Watson-Marlow (U-channel) pumps (102R)	3x Watson-Marlow (U-channel) pumps (102R)
Integrated Analog I/O	3x included with advanced model	–	–
Footprint	Space-saving compact design: 24 cm (9.5 in) wide	40 cm (16 in) wide	30.5 cm (12 in) wide

Ordering Information

Ordering information BioFlo® 120 Conversion Bundles
Keep your existing BioFlo®/CelliGen® 110 or 115 vessel + NEW BioFlo 120 Advanced

BioFlo 120 Upgrade for microbial applications with heat-blanketed vessel

Description	Existing agitation motor	Order no. Vessel Adapter	Order no. BioFlo 120 Controller
1 L heat-blanketed + BioFlo 120 Advanced (20 slpm)	Direct drive	B120110000	B120ACS004
2 L heat-blanketed + BioFlo 120 Advanced (20 slpm)	Direct drive	B120110001	B120ACS004
5 L heat-blanketed + BioFlo 120 Advanced (20 slpm)	Direct drive	B120110002	B120ACS004
10 L heat-blanketed + BioFlo 120 Advanced (20 slpm)	Direct drive	B120110003	B120ACS004

BioFlo 120 Upgrade for microbial applications with water-jacketed vessel

1 L/2 L water-jacketed + BioFlo 120 Advanced (20 slpm)	Direct drive	B120110004	B120ACS004
5 L/10 L water-jacketed + BioFlo 120 Advanced (20 slpm)	Direct drive	B120110005	B120ACS001

BioFlo 120 Upgrade for cell culture applications with heat-blanketed vessel

1 L heat-blanketed + BioFlo 120 Advanced (5 slpm)	Magnetic drive	B120ACS018	B120ACS008
2 L heat-blanketed + BioFlo 120 Advanced (5 slpm)	Magnetic drive	B120ACS018	B120ACS008
5 L heat-blanketed + BioFlo 120 Advanced (5 slpm)	Magnetic drive	B120ACS018	B120ACS008
10 L heat-blanketed + BioFlo 120 Advanced (5 slpm)	Magnetic drive	B120ACS018	B120ACS008

BioFlo 120 Upgrade for cell culture applications with water-jacketed vessel

1 L/2 L water-jacketed + BioFlo 120 Advanced (5 slpm)	Magnetic drive	B120ACS018	B120ACS008
5 L/10 L water-jacketed + BioFlo 120 Advanced (5 slpm)	Magnetic drive	B120ACS018	B120ACS008

For BioFlo® 120 control station ordering information see www.eppendorf.com/BioFlo120 or contact your local sales representative.

»A very user-friendly system, which is self-explanatory.«

Hamid Tehrani, RWTH Aachen University

To establish an efficient production process for itaconate, researchers at the RWTH Aachen have previously optimized fermentation of a metabolically engineered fungal strain and produced itaconate in high-density fed-batch processes controlled by a BioFlo 115 bioprocess control station.

Download the application note on www.eppendorf.com/appnote309 and read how they successfully transferred the process to a BioFlo 120.



From Shake Flask to Bioreactor



The new Innova® S44i Stackable Incubator Shaker - Convenient and reproducible planning of culture growth

- > Run in continuous, timed or programming mode
- > Reliable 24/7 operation with Eppendorf X-Drive
- > Compatibility with automated feeding and biomass monitoring systems (e.g. from Aquila Biolabs)

Learn more about the new Innova S44i Stackable Incubator Shaker and how it supports the preparation of a perfect inoculum for your bioprocess [here](#).

Your local distributor: www.eppendorf.com/contact
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www.eppendorf.com/BioFlo120