



# Most Compact

DASbox® Mini Bioreactor System for cell culture and microbiology



Epitome of compact:  
A 24-fold DASbox system  
takes up only 1.8 m (6 ft)  
of bench space.

# Parallel Process Development

## Parallel operation to shorten your time-to-market

The smart design of the Eppendorf DASbox makes the 4-fold units ideal for parallel processing of up to 24 bioreactors. Together with the DASware® software solutions, the DASbox supports process development following the Quality by Design (QbD) approach by providing comprehensive information management, integration of third-party analyzers, and Design of Experiments (DoE) tools as well as remote access.



BioBLU 0.3c  
for cell culture

BioBLU 0.3f  
for microbiology

BioBLU 0.3sc  
for stem cells

## Compact design and small working volumes save lab space and valuable resources

Lab space is critical: The DASbox requires only 7.5 cm (3 in) of bench space per bioreactor maximizing use of lab space while being expandable in 4-fold unit increments to increase capacity as needed. Small working volumes of 60 – 250 mL make it a perfect fit for clone/cell line screening, media optimization and small scale process development.

## One solution for all: fermentation and cell culture

Suitable for microbiology and cell culture, the DASbox features advanced process control and precise monitoring of all critical process parameters.

## DASbox® single-use solutions: the BioBLU® 0.3

The Eppendorf BioBLU 0.3 Single-Use Bioreactors for use with the DASbox offer a proven rigid-walled single-use bioreactor portfolio—with vessels for cell culture and microbial applications, including high cell density fermentation and cultivation of stem cells.

As the smallest member of the BioBLU Single-Use Bioreactor family the BioBLU 0.3 allows for scalability from 65 mL up to 40 L working volume.

	Autoclavable glass bioreactors	BioBLU 0.3 Single-Use Bioreactor
Fermentation	■	■
Suspension cells	■	■
Stem cells	■	■



Watch our video:  
[www.eppendorf.com/dasbox-video](http://www.eppendorf.com/dasbox-video)

Small, but powerful.



Unit 2		Unit 4	
pH	7.46 pH	pH	7.46 pH
DO	34.78 %DO	DO	34.24 %DO
T	36.7 °C	T	37.0 °C
N	400 rpm	N	401 rpm
Unit 1		Unit 3	
pH	7.48 pH	pH	7.48 pH
DO	34.31 %DO	DO	34.84 %DO
T	36.8 °C	T	36.9 °C
N	400 rpm	N	400 rpm

### LC Color Display

All vessels and parameters at a glance.



### Integrated Feeding and Monitoring

Variable speed pumps and standard pH and DO sensors (redox or level options and optical pH sensors available)



### Advanced Temperature Control

Liquid-free temperature control unit for easy handling



### TMFC Gassing

Integrated mass flow-controlled gas mixing system for continuous mixing of air, N<sub>2</sub>, O<sub>2</sub> and CO<sub>2</sub>

## Technical data

	<b>DASbox® Mini Bioreactor System for Cell Culture</b>	<b>DASbox® Mini Bioreactor System for Microbiology</b>
Parallel bioreactors	up to 24	up to 24
Software	DASware control, other DASware optional	DASware control, other DASware optional
Vessels	Glass and single-use vessels	Glass and single-use vessels
Working volumes	60 – 250 mL (glass)/100 mL – 250 mL (single-use)	60 – 250 mL (glass)/65 – 250 mL (single-use)
Drive	Overhead drive	Overhead drive
Impellers	Marine (glass)/pitched blade (single-use)/8-blade (glass, single-use)	Rushton-type
Agitation speed ranges	20 – 2,500 rpm (glass)/ 20 – 500 rpm (single-use, pitched blade impeller)/ 20 – 200 rpm (single-use, 8-blade impeller)	20 – 2,500 rpm (glass)/20 – 2,000 rpm (single-use)
Temperature control	Liquid-free heating and cooling (Peltier)	Liquid-free heating and cooling (Peltier)
Standard temperature range	10 – 60°C at 25°C RT	10 – 60°C at 25°C RT
Feeding lines per vessel	2 (standard)/4 (optional)	2 (standard)/4 (optional)
Standard feed rates (depending on tube diameter)	0.3 – 9.5 mL/h to 13 – 420 mL/h	0.3 – 9.5 mL/h to 13 – 420 mL/h
Gas flow control	TMFC; overlay and/or sparger	TMFC
Standard gas mixing	Air, N <sub>2</sub> , O <sub>2</sub> and/or CO <sub>2</sub>	Air, N <sub>2</sub> , O <sub>2</sub> and/or CO <sub>2</sub>
Standard gas flow rates	0.04 – 5 sL/h, 0.04 – 3.5 sL/h CO <sub>2</sub>	0.2 – 25 sL/h, 0.2 – 18 sL/h CO <sub>2</sub>
pH control	CO <sub>2</sub> /base, and other set-ups	Acid and/or base, and other set-ups
DO control	Cascade (O <sub>2</sub> concentration, gas flow rate) and other set-ups	Cascade (agitation speed, O <sub>2</sub> concentration, gas flow rate), and other set-ups
ORP (redox) measurement	-	Optional (select redox or level)
Level/foam	Optional	Optional (select redox or level)
OD measurement	Optional (DASGIP OD4)	Optional (DASGIP OD4)
Exhaust condensation	Liquid-free (Peltier)	Liquid-free (Peltier)
Exhaust analysis	-	Optional (DASGIP GA4)

Specifications are subject to change without notice

## Ordering information

Description	Order no. (system with glass vessels)	Order no. (system for single-use vessels)
<b>DASbox® Mini Bioreactor System for Cell Culture Applications, max. 5 sL/h gassing</b>		
4-fold system	76DX04CC	76DX04CCSU
8 fold system	76DX08CC	76DX08CCSU
16-fold system	76DX16CC	76DX16CCSU
24-fold system	76DX24CC	76DX24CCSU
<b>DASbox® Mini Bioreactor System for Microbial Applications, max. 25 sL/h gassing</b>		
4-fold system	76DX04MB	76DX04MBSU
8-fold system	76DX08MB	76DX08MBSU
16-fold system	76DX16MB	76DX16MBSU
24-fold system	76DX24MB	76DX24MBSU
<b>BioBLU® 0.3c Single-Use Bioreactor</b> , cell culture, 1 pitched-blade impeller, sterile, 4-pack		1386100000
<b>BioBLU® 0.3c Single-Use Bioreactor</b> , cell culture, 1 pitched-blade impeller, optical pH, sterile, 4-pack		1386100200
<b>BioBLU® 0.3f Single-Use Bioreactor</b> , fermentation, 2 Rushton-type impellers, sterile, 4-pack		1386100100
<b>BioBLU® 0.3sc Single-Use Bioreactor</b> , cell culture, 8 blade impeller, optical pH, sterile, 4-pack		1386100600

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