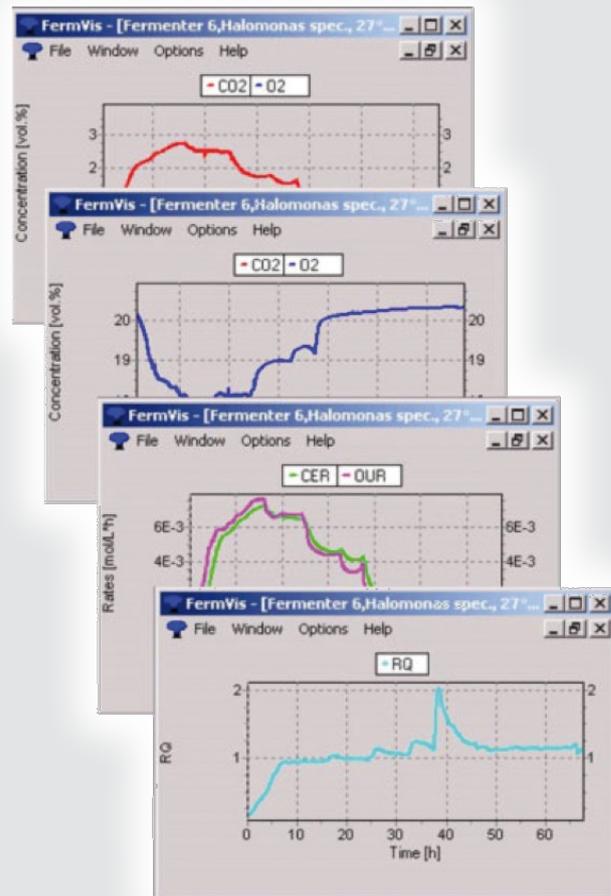


## Advantages

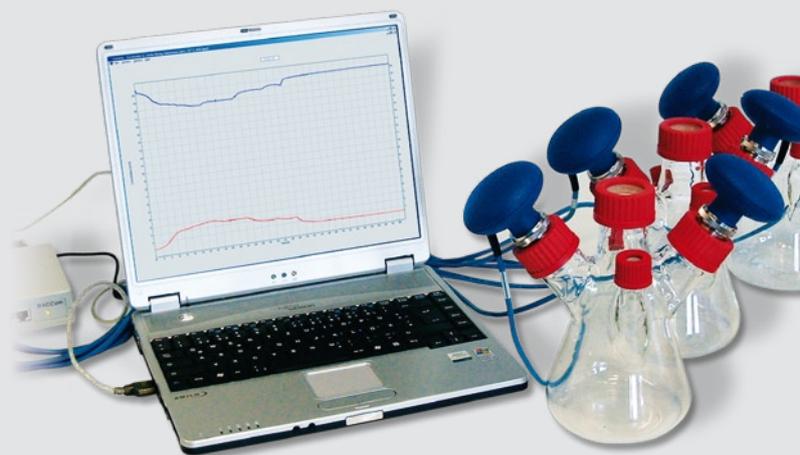
- > maximum results with minimum effort
- > reasonably priced
- > dependable and reliable
- > complete analyzing system
- > scalable growth
- > real time measurement
- > highest measuring density during cultivation
- > simultaneous analysis of CO<sub>2</sub> and O<sub>2</sub>
- > shows OTR, CTR and RQ in real time
- > defined test conditions
- > high comparability
- > controllable limitations
- > modular set-up



## Application areas

Analysis of metabolic processes in:

- > shake flasks
- > fermenters



**The analyzing system for  
the scale-up process**

# Data Sheet

Sensor		
Measuring principle	CO <sub>2</sub> : Infrared, dual wavelength O <sub>2</sub> : Zirconium dioxide (do not use in explosive atmospheres)	
Measuring range CO <sub>2</sub>	0 - 10 Vol.%, 0 - 25 Vol.%, 0 - 50 Vol.%*	
Measuring range O <sub>2</sub>	0,1 - 25 Vol.%, 1 - 50 Vol.%	
Long-term stability/Drift	< ± 2% value/year	
Connection tolerance	< 0,2% FS*** ± 3% reading	
Accuracy	< 0,2% FS*** ± 3% reading	
Housing	PA	
Dimension/Weight	80 x 160 mm D x W / approx. 350g ( 0.77 lb)	
Pressure dependence	Compensated: ± 3% reading (range)	
Operating humidity	0 - 100%	
Maintenance	1-point adjustment once a month (ambient air) Optional factory calibration once a year	
Mechanical connector	GL 45**	
Temperature range**	+0°C - +25°C +15°C - +40°C +30°C - +55°C	+32°F - +77°F +59°F - +104°F +86°F - +131°F
Storage temperature	+0°C - +60°C	+32°F - +140°F
	< 75% RH non-condensing	
Pressure range	0,8 - 1,3 bar**	11.6 - 18.85 psi**

BACCom	
Input	RJ 45 for 12 sensors
Output	RS 232, Ethernet, USB
Power supply	12 VDC, 4A

FermVis	
Display mode	Graph for CO <sub>2</sub> and O <sub>2</sub> concentration Graph and Table for OTR, CTR and RQ
System requirements	Win98 or higher

\*accuracy < 0,5% FS ± 5% reading  
\*\* others on request \*\*\* FS = full scale