

# EXcell 231 NIR Biomass Sensor Ø12mm



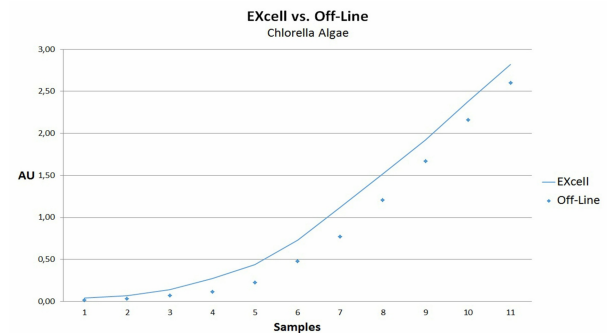
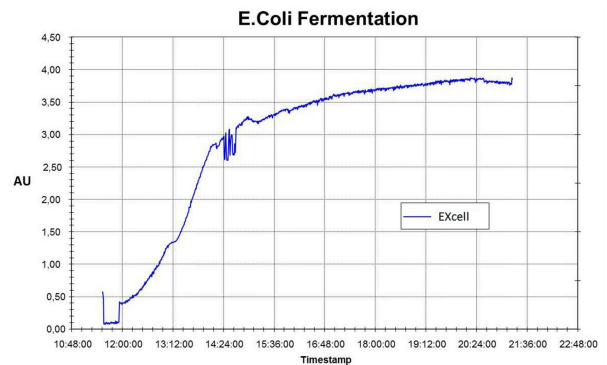
- » EBC / FAU / mg/l / AU / OD or customer defined units
- » Standardized 12 mm design with integrated amplifier
- » No traditional transmitter necessary
- » Wearless sapphire windows, CIP/SIP suitable
- » Hygienic design, autoclavable
- » Maintenance free due to LED light source
- » Data output directly on PC, Modbus RS485 or 0...20 mA

EXcell 231 is a high precision digital NIR-absorbance sensor in 12mm-hygienic design monitoring biomass measurement in biotech, food and pharma applications for both laboratories and industrial production processes.

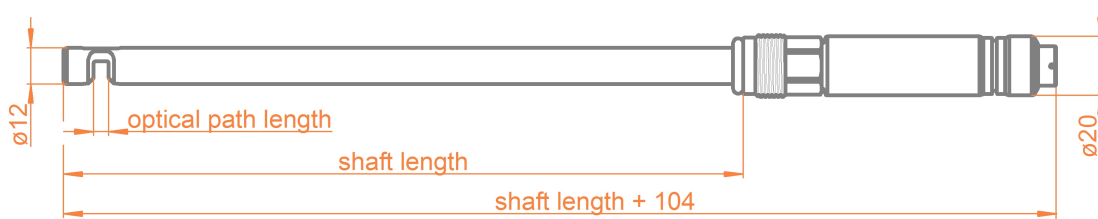
## Specifications

Measuring range	0...6 AU, 0...6600 EBC
Accuracy	99.25 %
Wave length	850 nm
Light source	LED
Optical path length	5 / 10 / 20 mm
Sensor length (mm)	120 / 225 / 325 / 425
Wetted material	stainless steel 1.4435 (316L)
Surface	Ra <0.37 µm electrolytical polished
Measuring window	sapphire
Process connection	thread PG13,5
Process temperature	0...90 °C, 141 °C max. for 2 hours (SIP cycle)
Process pressure	max. 10 bar (150 psi)
Electrical connection	Fischer Core Series
Cable length	2 m / 5 m
Interfaces	USB, RS485 Modbus, 0...20 mA with switching output
Protection class	IP68

## Typical Measurements



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## Ordercode

Code	Measuring range	Delivery
C	0...6 AU / 0...6600 EBC / 0...12 OD	3 weeks

Code	Shaft length	Delivery
120	120 mm	3 weeks
225	225 mm	3 weeks
325	325 mm	4 weeks
425	425 mm	4 weeks

Code	Optical path length	Delivery
05	5 mm	3 weeks
10	10 mm	3 weeks
20	20 mm	3 weeks

Code	Process connection	Delivery
PG1	Thread PG 13.5	3 weeks

## Accessories



Communication Interface ECI-03 - 0...20mA including switching contacts



Communication Interface ECI-02 RS485 Modbus



EXcap 110 - set of optical reference filters