

The EC3000 is a digital high performance electrochemical (amperometric) detector for clinical diagnostics.

- ✓ highly sensitive
- ✓ DC amperometry
- ✓ three-electrode circuit measuring cell
- ✓ programmable automatic operation

Sensitive – Flexible – Reliable

The "EC3000" is perfectly suited for analytical HPLC and for a wide range of clinical applications. Automatic functions make the detector ideal for routine analysis. Various operation methods make it easy to optimize measuring parameters for research applications.

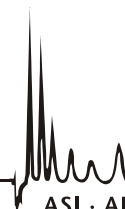
The detector is ideal for detecting **aromatic alcohols** and **amines** present in indole derivatives, **mercaptans**, **vitamins**, and **purine** derivatives.

The basic design contains a classical three-electrode circuit with automatic programmable flow cell purification.

All measurement and cell programs can be combined, programmed, and saved as desired. The residual current compensation is carried out with an autozero or programmable offset.

Depending on the type of application, other options can be realized such as saving baselines to determine gradient correction or automatic determination of the optimum potential in the auto-increment mode. Extensive self-tests upon instrument installation and an automatic autozero function at every start-up guarantee stable and reliable unattended routine analysis.

KNAUER's amperometric detector with a thin layer cell and three-electrode circuit is designed for high-precision reliable analysis.



Specifications and Technical Data

Detection:

Amperometric with a three-electrode circuit

Flow Cell:

Working Electrode:	glassy carbon in Kel-F, optional: Ag, Au, Cu, Ni, Pt in Kel-F
Auxiliary Electrode:	high-tensile stainless steel
Reference Electrode:	silver/silver chloride, refillable
Diaphragm:	base stable zirconia
Cell Volume:	1.5 µl with 30 µm distance mask, optional 0.75 µl with 15 µm spacer or 2.5 µl with 50 µm spacer
Materials:	stainless steel, PTFE, PEEK, zirconia, glassy carbon, Kel-F

Electronics:

Working Potential:	0 up to ± 2.00 V
Measuring Range:	± 10 pA up to 20 µA
Autozero Range:	up to ± 50 µA
Manual Offset:	up to ± 50 µA
LCD Display:	all relevant measuring data is simultaneously displayed
Filter:	5 Hz to 0.05 Hz (0.2 to 50 s)
Inherent Noise:	<0.3 pA
Purification Potential:	0 to ± 2.00 V
Purification Duration:	1 to 100 s
Purification Cycle:	1 to 10 cycles each
Measuring Program:	0 to 99
Analog Output:	± 1 V per measuring range
Power Supply:	12 V DC 2 A

Dimensions and Weight:

Dimensions:	260 x 160 x 510 mm (W x H x D)
Weight:	8.1 kg

Ordering Information

Article	
A1085	ClinLab® Amperometric Detector, Model EC3000, flow cell included