

# Capel-205

Capillary electrophoresis system



## MAIN APPLICATIONS

### Environmental analysis

- Natural, drinking, and waste water ( $\text{Br}^-$ ,  $\text{Cl}^-$ ,  $\text{F}^-$ ,  $\text{I}^-$ ,  $\text{NO}_2^-$ ,  $\text{NO}_3^-$ ,  $\text{PO}_4^{3-}$ ,  $\text{SO}_4^{2-}$ , acetate,  $\text{NH}_4^+$ ,  $\text{Ba}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{K}^+$ ,  $\text{Mg}^{2+}$ ,  $\text{Na}^+$ , and other inorganic and organic ions)
- Soils, sludge, and sediments (inorganic and organic anions and cations)

### Animal feeding & Veterinary

- Fodder, mixed fodder, and mixed fodder raw materials (amino acids, cations and anions, organic acids, vitamins)
- Veterinary drugs (antibiotics, antiprotozoal agents)

### Biopharma

- Quality control of therapeutic recombinant proteins
- Protein separation
- Enantiomers separation
- Pharmacokinetics studies

### Food testing

- Bottled water (inorganic and organic anions and cations)
- Carbonated drinks and juices (sweeteners, preservatives, synthetic dyes, antioxidants, vitamins, inorganic cations and anions, organic acids, sugars)
- Beer (inorganic cations and anions, hop and bitter acids (humulones and isohumulones), amino acids, organic acids, vitamins)
- Strong drinks (inorganic cations and anions, aromatic aldehydes, organic acids, sugars)
- Tea, coffee (caffeine, polyphenols)
- Foodstuff (preservatives and other food additives, organic acids, amino acids, amines, proteins)
- Milk and milk products (sugars, inorganic cations and anions, organic acids, vitamins, proteins, sweeteners, preservatives)

## ADVANTAGES OF CAPEL-205

### High capacity autosampler for sealed vials with automatic opening

- Standard microcentrifuge-type vial (1.5 mL)
- No sample evaporation
- No sample contamination

### Easy-to-change capillary cassette

- Capillary cassette change just in a few seconds

### Extended instrumental options

- Complete control of the instrument from a PC
- Broad range of controlled injection pressures allows analysis of viscous samples
- Reverse sample injection under vacuum: ultra-short analysis time (less than 1 min) and sample stacking to decrease detection limit
- Spectra scanning facilitates peak identification

### Precise temperature control of capillary with the circulating liquid ( $\pm 0.1$ °C)

- Extended range of applied buffers, increased efficiency in separation

### Powerful software package «Elforun»

- Increased flexibility in performing analyses of various complexity
- Any kinds of complex runs are possible including those with pre-programming of changes in analysis conditions
- Customized report, data export to other programs

### Streaming potential control technique

- Improved repeatability of migration time and accuracy of analysis

## SPECIFICATIONS

Detection wavelength	190–400 nm, light source – deuterium lamp
Analysis	Constant voltage, (+/-) 1–25 (30)* kV in a 1 kV step Automatic (electronic) polarity switch Current 0–300 $\mu$ A Pressure, up to 100 mbar Programmable changing of wavelength, pressure and voltage during analysis
Injection	By voltage, (+/-) 1–25 (30)* kV in a 1 kV step; by pressure, from –100 to 100 mbar in a 1 mbar step
Rinsing	By pressure, 500–2000 mbar in a 1 mbar step
Capillary	Length 40–120 cm Internal diameter 50, 75 $\mu$ m
Temperature control of capillary	From 10 °C below ambient temperature (although not lower than +5 °C in absolute value) to +50 °C in absolute value
Sampler	Autosampler for 59 vials (standard microcentrifuge-type 1.5 mL)
Power requirements	110–240 VAC, 50/60 Hz
Power consumption	170 W
Dimensions/Weight	470×530×410 mm, 30 kg
Control	Elforun software

\* Maximum voltage value depends upon system modification

## SERVICES

Installation of instruments can be carried out at a customer's site by our service engineers. Personnel training specific to the customer needs can be also provided.

## WARRANTY

All Capel-205 capillary electrophoresis systems are covered by a full 1-year warranty.



Find your local Lumex Instruments distributor:  
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The information and specifications in this publication are subject to change without notice.

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