

HIGH PERFORMANCE CAPILLARY ELECTROPHORESIS SYSTEM

CAPEL 103R, CAPEL103RT,
CAPEL104, CAPEL104T
and CAPEL105



METHOD

High performance capillary electrophoresis

PRINCIPLE OF OPERATION

Is based on the migration and separation of components of a liquid mixture under the action of an electric field

FEATURES AND ADVANTAGES

- high separation efficiency
- low reagent consumption
- simple sample preparation
- compact benchtop design
- autosamplers (10 inlet and 10 outlet vials) in CAPEL-104, CAPEL-104T, and CAPEL-105
- user-friendly software
- implementation of various methods (capillary zone electrophoresis, micellar electrokinetic chromatography, capillary isoelectric focusing, capillary gel electrophoresis, capillary isotachopheresis)



APPLICATIONS

Environmental analysis	Water quality monitoring (cations, anions, pesticides) Soils (cations, anions, pesticides)
Food industry	<ul style="list-style-type: none"> • Beverages and juices (cations, anions, vitamins, organic acids, preservatives, antioxidants, dyes, sweeteners) • Mineral water (cations and anions) • Vodka (cations and anions) • Wines and brandies (cations) • Tee, coffee (caffeine, catechin) • Foodstuff (vitamins, amino acids, amines, mycotoxins)
Agriculture	Grain and grain products (amino acids, mycotoxins) Premixes, mixed fodder (amino acids, amines, vitamins, mycotoxins)
Chemical industry	Technological monitoring Composition determination of raw material and inters
Pharmaceutics	Patent medicines analysis Technological monitoring Enantiomers separation
Biochemistry	Analysis of proteins by capillary isoelectric focusing technique Pharmacokinetics studies Hemoglobin HbA1c determination
Forensic studies	Analysis of explosives residual Drugs analysis



EQUIPMENT AND OPTIONS

- capillary electrophoresis system CAPEL (103R, 103RT, 104, 104T or 105 model)
- spare capillary cassette
- Chrom&Spec® software package
- kits for analysis [by request]

SPECIFICATIONS

	CAPEL-103R	CAPEL-103RT	CAPEL-104	CAPEL-104T	CAPEL-105
Detector	UV, 254 nm				190-380 nm
Analysis	Constant voltage 1-25 kV in 1 kV steps, manual polarity switching, current 0-200 µA				
Injection	By voltage 0-25 kV; by pressure 10-30 mbar				
Rinsing	By pressure 1000 mbar				
Capillary	Length/Internal diameter: 30-100 cm/75 µm (optional: 50 µm)				
Capillary cooling	Air-forced cooling	Liquid cooling	Air-forced cooling	Liquid cooling	
Sampler	Manual operation mode			Autosampler	
Power requirements	220 Vac, 50/60 Hz (optional: 85 - 264 Vac)				
Power consumption	80 W	150 W	80 W	150 W	200 W
Size	420x330x360 mm	420x350x360 mm	500x500x500 mm		
Weight	16 kg	16 kg	25 kg	25 kg	25 kg

WARRANTY

All CAPEL CE systems are covered by a twelve-month warranty.

SERVICES

Installation and commissioning of LUMEX instruments can be carried out at a Customer site by our service engineers. Personnel training specific to the customer needs can also be provided. Free delivery of spare parts and repair of the instruments are provided within the warranty period.

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The information and specifications in this publication are subject to change without notice.

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