

FP910

Flame Photometer



The estimation of the alkali materials by flame photometry is a very important application in routine chemical analysis. Low temperature flame photometry provides a very reliable, fast and convenient procedure. The technique provides a rapid and reliable means of analysing sodium, potassium, calcium, lithium and barium in a variety of materials. PG Instruments' latest model, the FP910, offers the combination of clinical, industrial and education applications in ONE instrument and gives accurate, fast and precise analysis in one simple aspiration.

FP910 Flame Photometer

PG Instruments – a leader in the development of first class scientific instruments – is pleased to introduce its NEW FP910 Flame Photometer.

The FP910 is a Digital Flame Photometer, Microprocessor Controlled, for the quick and simple determination for up to 5 elements in one single aspiration.

Product Description

The FP910 Flame Photometer is Microprocessor Controlled to give fast, accurate and precise analysis of sodium, potassium, calcium, barium and lithium in one single aspiration. Two models are available; the FP910-4, which allows analysis of FOUR elements (sodium, potassium, calcium, lithium) and the FP910-5, for the analysis of FIVE elements (sodium, potassium, calcium, lithium, barium).

Typical Applications

Our versatile new FP910 Flame Photometers cover a wide range of applications including:

- ▶ Soil & Agricultural Analysis
- ▶ Biological & Chemical Fluids
- ▶ Petrochemical Analysis
- ▶ Food & Drink Analysis
- ▶ Cement, Minerals & Glass Analysis

Features & Functions

- ▶ Up to 5 elements in one single aspiration (Na, K, Li, Ca and Ba)
- ▶ Touch screen for simple data input
- ▶ Calibration curve fit routines first order and second order
- ▶ Multiple calibration curve saving facility
- ▶ Sample data storage
- ▶ Data displayed in concentration units i.e. ppm, meq, etc
- ▶ Electronic ignition
- ▶ Flame out safety protection sensor
- ▶ Operates using propane butane, natural gas or LPG
- ▶ Direct printing using integral thermal printer
- ▶ USB interface to connect with PC for data collection software
- ▶ Automatic selection of optical filters
- ▶ Up to 12 point calibration capability



Selection of analytical parameters using touch screen.



Burner Ignition System showing ignitor, 10 hole compact burner, flame shield and flame safety detector.

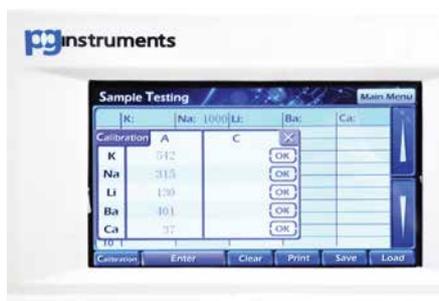
Touch Screen Technology

Embedded in the FP910 Flame Photometer is a 7 inch Colour LCD touch screen offering:

- ▶ Colour graphics such as calibration graph and data
- ▶ Simultaneous analytical results
- ▶ Selection of elements
- ▶ Concentration unit selection
- ▶ Automatic calculation of curve coefficients
- ▶ Language selection including English, Turkish, Portuguese, Polish and Russian (more to follow)



Curve calibration selection.



Touch alphanumeric keyboard for calibration and analytical data files.



Numeric touch pad to enter calibration values.



Sample of calibration data.





Technical Specifications

Detection Limits

Element	mmol/l	ppm (µg/ml)
Potassium (K)	≤0.004	≤0.156
Sodium (Na)	≤0.008	≤0.184
Lithium (Li)	≤0.015	≤0.104
Calcium (Ca)	≤0.050	≤2.00
Barium (Ba)	≤0.044	≤6.03

Linear Error

Element	mmol/l
Potassium (K)	≤0.005
Sodium (Na)	≤0.03
Lithium (Li)	≤0.021
Calcium (Ca)	≤0.075
Barium (Ba)	≤0.066

Analytical Measuring Range

High Range	0 ~ 5ppm
Medium Range	0 ~ 30ppm
Low Range	0 ~ 150ppm

We reserve the right to modify, revise/upgrade, suspend or discontinue any Product in whole or in part, either temporarily or permanently, with or without notice.

General Specification

Reproducibility	≤2%
Stability	< 3%
Response Time	< 8 seconds
Sample Uptake Volume	< 6 ml/minute
Printer	Integral Thermal Printer
USB Data Output	Optional FPWin Data Collection Software
Display	7 inch Colour LCD touch screen
Languages	English, Turkish, Portuguese, Polish, Russian
Concentration units	ug/ml, mg/100ml, mmol/l, meq/l
Gases	LPG, natural gas, propane butane
Dimensions	400 x 250 x 500 mm
Weight	8kgs



Specification for Air Compressor

Type	Single Cylinder Piston Compressor with air tank – OIL FREE
Power	1/6 HP
Speed	1450-1700 rpm
Air Output	20-23 l/min
Adjustable Pressure Range	0 – 6 Bar
Air Tank	3 litres

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The highly qualified and long experienced team at PG Instruments Ltd are recognised experts in Spectroscopy, Electrochemistry and Relevant Technologies. They have been developing and manufacturing analytical instruments for science for over a decade and have a worldwide recognised reputation for excellence in their field.