

# Flame Photometer

## Digital Flame Photometer

381, 391

### Advantages

- Mixing Chamber Designed For Stable Flame
- Simple & Easy To Operate
- Narrow Band Interference Filters
- Accurate Na, K, Ca & Li Determination
- Dual Channel For Simultaneous Observation Of Na & K With Single Aspiration (391)
- Concentric Non-Corrosive Nebulizer
- Auto Ignition



1 Year Warranty



**Digital Flame Photometer Model 381** is a simple & easy to operate instrument for determination of Sodium, Potassium Calcium & Lithium. It is an ideal instrument for soil testing labs. **Digital Clinical Flame Photometer Model 391** is a Dual Channel Flame Photometer used for simultaneous observation of Na & K in blood serum (Plasma), Urine & other type of biological fluids.

The instruments are supplied in two units viz. Main Unit and Compressor Unit. The Main Unit comprises of digital display, detector, filters and nebulizer. The compressor unit supplies the compressed air to the Main Unit.

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Air at a given pressure is passed into the atomiser. The suction produced by it draws the solution of the sample into the nebulizer and is sprayed as fine mist into the flame. The light emitted by the element at the characteristic wavelength is isolated by the narrow band interference filters, which then falls on to the silicon photodiode. After signal conditioning of the photodiode output, it is sent to digital converter and the results are displayed directly in ppm/meq value. The narrow band interference filters are mounted on a rotating disc fitted within the Main Unit. Appropriate filter can be selected by rotating this disc with the thumb. The oil free compressor with regulator maintains a stable airflow.





## Flame Photometer

### Technical Data

MODEL	381	391	
		<b>Serum</b>	<b>Urine</b>
RANGE	Na : 0-100 ppm K : 0-100 ppm Ca : 15-100 ppm (Optional) Li : 10-100 ppm (Optional)	Na : 0-200 meq/l K : 0-10 meq/l Ca : - Li : 0-2 meq/l (Optional)	0-200 meq/l 0-100 meq/l (Optional) 0-10 meq/l -
SENSITIVITY	Na : 5 ppm K : 5 ppm Ca : 10 ppm (Optional) Li : 10 ppm (Optional)		
READOUT	2½ digit bright red LED display	Dual 2½ digit bright red LED display	
ACCURACY	±2% upto 40 ppm ±5% above 40 ppm	±2% upto 100 meq ±5% above 100 meq	
IGNITION SYSTEM	In-built electronic Ignition by press of a switch	In-built electronic Ignition by press of a switch	
DIMENSIONS (LxBxH)	375 x 245 x 220 mm (Approx.)	375 x 245 x 220 mm (Approx.)	
MEASUREMENT SYSTEM	One element at a time	2 elements on dual LED display	
REPEATABILITY	± 2 Counts		
DETECTOR	Silicon Photodiode		
FILTERS	Narrow band interference glass filters		
NEBULIZER	Black bakelite, axial flow type		
FLAME SYSTEM	LPG & dry oil free air		
WARM UP TIME	10 minutes		
POWER	230 V±10% AC, 50 Hz		
WEIGHT	Main Unit : 7.5 Kg. (Approx.) Compressor : 8 Kg. (Approx.)		

#### COMPRESSOR UNIT

**Air Supply :** By oil free mini compressor unit with pressure regulator

**Combustion Gas LPG :** Controlled by precision regulator

**Power :** 230 V ± 10% AC, 50 Hz

**Dimensions (LxBxH) :** 290 x 255 x 210 mm (Approx.)

**Weight :** 8 Kg. (Approx.)

Rugged & accurate instrument to determine concentration of Na, K, Ca & Li in any solution.

### Product Range

Semi Auto Analyser, Microprocessor UV/VIS Spectrophotometer, Microprocessor pH Meter, Microprocessor Conductivity Meter, Microprocessor Photo Colorimeter, Turbidity Meter, Microprocessor KF Titrimeter, Microprocessor DO Meter, Microprocessor TDS Meter, Temperature Indicator, Microprocessor Water & Soil Analysis Kit, Microprocessor Salinity Meter, Digital Colony Counter, Portable pH Meter, Portable Conductivity Meter, Portable TDS Meter, Portable DO Meter, Digital Tablet Disintegration Apparatus, Digital Friability Test Apparatus.

**Other Flamephotometers available :** Microprocessor Flame Photometer Model 381, 391, 1381 & 1382

