Flame Photometer

Flame Photometer Digital Flame Photometer

381

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



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.

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.

ENVIRONMENTAL AND SCIENTIFIC INSTRUMENTS CO.



Flame Photometer

COMPRESSOR UNIT

Air Supply: By oil free mini compressor unit with pressure regulator with load and over heating protection

Combustion Gas LPG : Controlled by precision regulator (Domestic Gas Cylinder)

Power: $230 \text{ V} \pm 10\% \text{ AC}$, 50 Hz

 $\textbf{Dimensions(LxBxH)}: 290 \times 255 \times 210 \, \text{mm}$

(Approx.)

Weight: 8 Kg. (Approx.)

ACCESSORIES

Operation & Service Manual - 2 Nos

Fuse - 1 No

Ignition Filament - 1 No

Capilary Tube Set - 1 Set

Cleaning Wire Set - 1 Set

Dust Protection Cover - 1 No

Nose Plier - 1 No

Technical Data	
MODEL	381
RANGE	Na : 0-100 ppm K : 0-100 ppm Ca : 15-100 ppm _(Optional) Li :10-100 ppm _(Optional)
SENSITIVITY	Na : 5 ppm K : 5 ppm Ca : 10 ppm (Optional) Li :10 ppm (Optional)
READOUT	2¹/₂ digit bright red LED display
ACCURACY	±2% upto 40 ppm ±5% above 40 ppm
IGNITION SYSTEM	In-built electronic Ignition by press of a switch
DIMENSIONS (LxBxH)	375 x 245 x 220 mm (Approx.)
MEASUREMENT SYSTEM	One element at a time
REPEATABILITY	± 2 Counts
DETECTOR	Silicon Photodiode
FILTERS	Narrow band interference glass filters (Na & K)
AUTOMISER	S.S. non-corrosive & easily accessible, 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.)

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 Flame Photometers available: Microprocessor Flame Photometer Model 381, 391, 1381 & 1382



