

Flame Photometer Digital Flame Photometer

381

Advantages

- Simple & Easy to Operate
- Narrow Band Interference Filters
- Accurate Na, K, Ca, & Li Determination
- Mixing Chamber Designed For Stable Flame
- Concentric Non-Corrosive Nebulizer
- Auto Ignition



1 Year
Warranty

Digital Flame Photometer – 381 is a simple & easy to operate instrument for determination of Sodium, Potassium, Calcium & Lithium. It is an ideal instrument for soil testing labs.

The instruments are supplied in two units viz. Main Unit and Compressor Unit. The Main Unit comprises of digital displays, 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 sample solution 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 units. 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

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 V \pm 10% AC, 50 Hz

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

Weight : 8 Kg. (Approx.)

ACCESSORIES

Operation & Service Manual - 2 Nos

Fuse - 1 No

Ignition Filament - 1 No

Capillary Tube Set - 1 Set

Cleaning Wire Set - 1 Set

Dust Protection Cover - 1 No

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	2 $\frac{1}{2}$ digit bright red LED display
ACCURACY	\pm 2% upto 40 ppm \pm 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	\pm 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 \pm 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.

Double Beam UV/VIS Spectrophotometer, Single Beam UV/VIS Spectrophotometer, Flame Photometer, Haemoglobin Meter, Photo Colorimeter, pH Meter, Conductivity Meter, TDS Meter, DO Meter, Salinity Meter, Turbidity Meter, Nephelometer, Colony Counter, Karl Fischer Moisture Titrator, Fluorometer, Dissolution Test Apparatus, Disintegration Test Apparatus, Friability Apparatus, Melting Point Apparatus, Tap/Bulk Density Apparatus, Hardness Tester, Leak Test Apparatus, Flocculator/Jar Test Apparatus, Telethermometer, Temperature Indicator, Water & Soil Analysis Kit, Portable pH Meter, Portable Conductivity Meter, Portable TDS Meter, Portable DO Meter.

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