

**Product Name :**  
Microprocessor Flame Photometer**Product Code :**  
ELAB-FLM0001**Description :**

Microprocessor Flame Photometer

**Technical Specification :**

Microprocessor Flame Photometer Features:-

Microprocessor Based with Printer Interface Auto Gas Cutoff Auto Flame Failure Detection  
Four Measurements in Single Aspiration Setup Storage Facility Sample Data Storage Facility Curve Calibration  
Programmability Using Maximum of 5 Standards Multiple Calibration Curve Saving Facility Data Processing  
Through Curve Fitting Techniques, Least Square, Quadratic Online Help Key Direct Results in ppm and meq  
Useful for Medical & Soil Testing Microprocessor Flame Photometer comes with flame failure detection and auto  
gas cutoff facility.

In case of power failure, the gas cuts off automatically.

In case the flame goes off accidentally during work, the flame failure alarm sounds after few seconds

Microprocessor Flame Photometers are used for the determination of sodium, potassium, calcium and lithium.  
They use the latest microcontroller technology and advanced engineering techniques so as to give enhanced  
and reproducibility.

They have soft touch membrane key for ease of operations.

The sample solution is aspirated through an automiser.

Sample, Air and the fuel are mixed in the mixing chamber which is then sprayed as a very fine mist into the  
flame.

The color of the flame is changed depending upon the concentration of elements present.

Radiations from the flame pass through the sensing system and specific narrow band interference filter which  
permits only the characteristic radiation to pass to the photo-detector.

The output of the photo-detector is then processed by the microcontroller and the final results are displayed on

---

the 20 x 4 line alphanumeric lcd with backlit.

In both models 5-Point calibration facility and non-linearity correction is provided through an automatic curve fitting software.

Facility has been provided for re-standardization with a single standard, thereby, eliminating the need of the multiple standards once a calibration has been performed.

Specifications:-

Range Na: 0 - 100 ppm Upto 250 meq/l, 1:100 dil K: 0

- 100 ppm Upto 250 meq/l, 1:100 dil Ca: 0

- 100 ppm Upto 250 meq/l, 1:100 dil Li: 0

- 100 ppm Upto 250 meq/l, 1:100 dil Na: 0

- 200 1:100 dil K: 0 - 10 1:100 dil - Li: 0

- 2 1:5 dil Na: 0 - 250 1:100 dil K: 0

- 100 1:100 dil Ca: 0 - 10 1:2 dil

- Sensitivity General: Na: 0.5 ppm, K: 0.5 ppm, Li: 0.5 ppm, Ca: 15 ppm Filters Na & K supplied (Ca & Li are optional at extra cost) Resolution 0.1 ppm/meq Reproducibility < 1% coefficient of variation for 20 consecutive samples using 10 ppm Na set as maximum standard Curve Fit Accuracy < 2% error when 3 ppm Na/K and 5 ppm Li are set as maximum standards Display 20 x 4 alphanumeric LCD with backlit Average Time In-built in software Flame System LPG and dry oil free air Detector Silicon photodiode Calibration Up-to 5-Point calibration with curve fitting software Gas Control Adjustable with knobs Flame Failure Auto detection Gas Cutoff Automatic Ignition System Auto ignition Automiser Axial flow type Printer Provision for attachment of dot matrix printer or HP laserjet/ inkjet (non-windows) printers with centronics parallel interface RS-232C Available (PC software at extra cost) Power 230 V + 10% AC, 50 Hz Dimensions 285 x 255 x 210 mm (L x B x H) (Approx.) Weight 7.5 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 290 x 255 x 210 mm (L x B x H) (Approx.) Weight 8 Kg (Approx.)

 **LAB ENGINEERING**

**Elab Engineering Equipments Manufacturers**