MICROPROCESSOR FLAME PHOTOMETER, MODEL 1385 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 accidently during work, the flame failure alarm sounds after a few seconds.

Both Microprocessor Flame photometers Model 1385 & Model 1382 are used for the determination of Sodium, Potassium, Calcium, Lithium & Barium. They use the latest microcontroller technology and advanced engineering techniques so as to give enhanced accuracy and reproducibility. They have soft touch membrane keys for ease of operation. The solution is aspirated through an atomizer. Air, sample and the fuel are mixed in the mixing chamber which is then sprayed as a very fine mist into the flame. Radiations from the flame passes through a specific narrow band interference filter and pass to the photo-detector. The final results are displayed on the 20 x 4 alphanumeric LCD. The standard model comes with 2 filters (Na & K). Additional filters Ca & Li are optional at extra cost.

In both the models, Calibration can be done with up to 25 standards of user choice (5 point for each element) and non-linearity correction is provided through an automatic curve fitting software. Multiple Calibration Curves can be stored in the memory. Facility has been provided for re-standardization with a single standard, thereby, eliminating the need of multiple standards once a calibration has been performed.
### Technical Data

#### Flame Photometer

<table>
<thead>
<tr>
<th>MODEL</th>
<th>1385 &amp; 1382</th>
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<tbody>
<tr>
<td>RANGE</td>
<td>ppm</td>
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<tr>
<td></td>
<td>Na : 0-100</td>
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<tr>
<td></td>
<td>K : 0-100</td>
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<td>Ca : 0-100</td>
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<tr>
<td></td>
<td>Li : 0-100</td>
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<tr>
<td></td>
<td>Ba : 50-1000</td>
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</tbody>
</table>

#### Filters
- Na & K Supplied (Ca & Li are optional at extra cost)

#### Resolution
- 0.1 ppm / 0.1 meq.

#### Reproducibility
- < 1% coefficient of variation for 20 consecutive samples using 10 ppm Na set as Maximum Standard

#### Linearity
- < 2% error when 3 ppm Na/K and 5 ppm Li are set as Maximum Standard

#### Curve Fit Accuracy
- ±2% of FS

#### Display
- 20 x 4 Character alphanumeric LCD display with backlight

#### Average Time
- In-built in Software

#### Flame System
- LPG & Dry Oil Free Air

#### Detector
- Photodiode

#### Calibration
- General Mode : Na:0.5 ppm, K:0.5 ppm, Li:0.5 ppm, Ca:15 ppm, Ba:50 ppm
- with up to 25 Standards of User Choice with Curve Fitting Software (5 for each Element)
- Multiple Calibration Curves can be stored in the memory

#### Gas Control
- Adjustable with knob

#### Flame Failure
- Auto Detection (Model 1385 only)

#### Gas Cutoff
- Automatic (Model 1385 only)

#### Ignition System
- Auto Ignition

#### Automiser
- Axial Flow Type

#### Dimensions (LxWxH)
- Instrument : 285 x 255 x 210 mm Approx.
- Box : 600 x 360 x 320mm

#### Printer
- Provision for attachment of Dot-Matrix Printer or HP Laserjet/Inkjet printer (non-win printers) with centronics parallel interface

#### Rs 232 Interface
- Available (PC software at extra cost)

#### Weight
- Main Unit : 9 Kg. (Approx.)
- Box : 10.5 Kg (Approx)

#### Power Supply
- 230 V AC ± 10%, 50 Hz

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**Note:** Specifications are subject to change due to continuous improvements.