

# Microprocessor Flame Photometer

1385 & 1382

## Advantages

- Auto Gas Cutoff Facility (Model 1385 only)
- Auto Flame Failure Detection Facility (Model 1385 only)
- $\mu$ P Based With Printer Interface
- Five Element Measurement In Single Aspiration of The Sample
- Calibration Curve Programmability Using Maximum of 25 Standards
- Data Processing Through Curve Fitting Techniques - Least Squares, Quadratic
- Multiple Calibration Curves Saving Facility
- Samples Data Storage Facility
- Online Help Key
- Printer Attachment Facility
- Measurement In ppm & meq
- Useful For Both Medical & Soil Testing Applications
- Setup Storage Facility upto 10 setups



1 Year  
Warranty

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 accidentally during work, the flame failure alarm sounds after a few seconds.

Both Microprocessor Flamephotometers Model 1385 & Model 1382 are used for the determination of Sodium, Potassium, Calcium, Lithium & Barium. They uses 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.



## Flame Photometer

### Technical Data

#### COMPRESSOR UNIT

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

Combustion Gas LPG: Controlled by precision regulator

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

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

Box: 370 x 358 x 300mm

Weight : 8 Kg. (Approx.)

Box: 9 Kg (Approx.)

MODEL	1385 & 1382					
	ppm	General Range meq/l	Serum Range meq/l		Urine Range meq/l	
RANGE	Na : 0-100	Upto 250 meq/l, 1:100 dil.	0-200 meq/l,	1:100 dil.	0-250 meq/l,	1:100 dil.
	K : 0-100	Upto 250 meq/l, 1:100 dil.	0-10 meq/l,	1:100 dil.	0-100 meq/l,	1:100 dil.
	Ca : 0-100	Upto 250 meq/l, 1:100 dil.	-	-	0-10 meq/l,	1:2 dil.
	Li : 0-100	Upto 250 meq/l, 1:100 dil.	0-2 meq/l,	1:5 dil.	-	-
	Ba : 50-1000	-	-	-	-	-
SENSITIVITY	General Mode : Na:0.5 ppm, K:0.5 ppm, Li:0.5 ppm, Ca:15 ppm, Ba : 50 ppm					
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	$\pm$ 2% of FS					
DISPLAY	20 x 4 Character alphanumeric LCD display with backlit					
AVERAGE TIME	In-built in Software					
FLAME SYSTEM	LPG & Dry Oil Free Air					
DETECTOR	Photodiode					
CALIBRATION	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 (LxBxH)	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 $\pm$ 10%, 50 Hz					

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

### Product Range

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.

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