Microprocessor
Flame Photometer
Flame Photometer

1382

Advantages

- *μ*P Based With Printer Interface
- Four Element Measurement In Single Aspiration Of The Sample
- Calibration Curve Programmability Using Maximum Of 5 Standards
- Data Processing Through Curve Fitting Techniques - Least Squares, Quadratic
- Multiple Calibration Curves Saving Facility
- Samples Data Storage Facility
- Printer Attachment Facility
- Measurement In ppm & meq
- Useful For Both Medical & Soil Testing Applications

1 Year Warranty

MICROPROCESSOR FLAME PHOTOMETER, MODEL 1382 is an ideal instrument for the determination of Sodium, Potassium, Calcium and Lithium. It uses the latest microcontroller technology and advanced engineering techniques so as to give enhanced accuracy and reproducibility. It has soft touch membrane keys for ease of operation. The solution is aspirated through an atomiser. Air, sample 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 passes 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 digital display.

The 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 multiple standards once a calibration has been performed.

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Technical Data

	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.	-
SENSITIVITY	General Mode : 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	$\pm 2\%$ FS $\pm$ 2 Digits			
CURVE FIR 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	Up to 5 Point Calibration with Curve Fitting Software			
GAS CONTROL	Adjustable with knob			
IGNITION SYSTEM	Auto Ignition			
AUTOMISER	Axial Flow Type			
DIMENSIONS (LxBxH)	365 x 245 x 220 mm Approx.			
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 : 7.5 Kg. (Approx.) Compressor : 8 Kg. (Approx.)			
POWER SUPPLY	230 V AC $\pm$ 10%, 50 Hz			

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

Weight : 8 Kg. (Approx.)

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

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