

## **Digital Flame Photometer**

Digital Flame Photometer is considered as a simple & easy to operate instrument for the determination of Sodium, calcium. Potassium and Lithium. It is considered as a perfect and ideal instrument for the purpose of soil testing labs. This Digital Flame Photometer is a two sided channel flame photometer which has been widely used for the purpose of simultaneous observation of Sodium and Potassium levels in the blood serum (plasma), Urine and other kinds of biological fluids.

The instruments are mainly supplied in 2 units which are Main Unit and Compressor Unit. The Main Unit is made up of digital displays, detector, filters and nebulizer. The compressor unit then supplies the dense or compacted air to the main unit. Air at a given pressure is then passed on into the atomiser. The suction which when produced by it, will draw the sample solution into the nebulizer and then it is further sprayed as a fine mist back into the flame. The light which is emitted by the component at the distinctive wavelength is then secluded or cut - off by the narrow band interference filters, which then descend on to the silicon photodiode. Post the signal conditioning of the photodiode output, it is then being sent to the digital converter and the outcomes are then displayed directly in the ppm / meg units. The narrow band obstruction filters are then mounted on a rotating disc which has been fitted within the Main Unit. A suitable and apt filter can be chosen by rotating this disc with the help of a thumb. In addition to all this, this oil free compressor comes with a regulator which can help sustain a stable airflow.



## **Key Features:**

- It comes with Dual or twin-fold Channel For Simultaneous Observation of Na & K with Single Aspiration (Model - 591).
- It is easy, simple and hassle free Operate.
- It also has an Auto Ignition.
- It has precise, Accurate Na, K, Ca, & Li Determination.
- It comes with a Mixing Chamber which is intended mainly for Stable Flame.
- It comes with a Concentric Non Corrosive Nebulizer It comes with Narrow Band Interference Filters.

**NOTE**: Technical specifications & Design are subject to change without prior notice, due to continuous up gradation.











Capacity & Models	"381"	"391"	
		Serum	Serum
Range	Na: 0 ppm - 100 ppm K: 0 ppm - 100 ppm Ca: 15 ppm - 100 ppm (Optional) Li: 10 ppm - 100 ppm (Optional)	Na: 0 meq/l - 200 meq/l K: 0 meq/l - 10 meq/l - Li: 0 meq/l - 2 meq/l (Optional)	Na: 0 meq/l - 200 meq/l K: 0 meq/l - 10 meq/l - Li: 0 meq/l - 2 meq/l (Optional)
Sensitivity	Na: 5 ppm K: 5 ppm Ca: 10 ppm (Optional) Li: 10 ppm (Optional)	-	
Accuracy	+ 2% up to 40 ppm, + 5% above 40 ppm	+ 2% up to 100 meq + 5% above 100 meq	
Measurement System	One part at a time	Two parts at a Time	
Readout	2½ Digit 7 - Segment LED	Dual 2½ Digit, 7 - Segment LED	
Ignition System	It has an integrated or In-built electronic Ignition which works by press of switch		
Repeatability	+ 2 Counts		
Detector	Silicon Photodiode detector		
Filters	It uses Narrow band interference glass Iters		
Nebulizer	Comes ith Black backelite, axial flow type of nebulizers		
Flame System	It comes with LPG & dry oil free air		
Warm - Up Time	10 minutes		
Power	230 V + 10% AC, 50 Hz		
Dimensions	Ranges from 375 mm x 245 mm x 220 mm (L x B x H) (Approximately)		
Weight	7.5 Kg (Approximately)		
COMPRESSOR UNIT			
Air Supply	By oil free mini compressor unit with pressure regulator		
Combustion Gas	LPG controlled by accuracy regulator		
Power	230 V + 10% AC, 50 Hz		
Dimensions	290 mm x 255 mm x 210 mm (L x B x H) (Approximately)		
Weight	8 Kg (Approximately)		

**NOTE**: Technical specifications & Design are subject to change without prior notice, due to continuous up gradation.





