



# **Cool FP 501**Flame Photometer

Flame Photometry provides a simple method of analysis and concentration determination of elements which cannot be easily measured using any other technique.

BSR Technologies introduces Hi-tech Flame Photometer COOL FP-501, design for reliable and routine analysis for quality control in clinical laboratory, industries and in educational institutions. COOL FP-501 has a unique design for measuring four elements (Na, K, Ca, Li/Ba) simultaneously within 35 seconds. COOL FP-501 covers wide range of industrial application in food and beverages, cement sectors, pharmaceutical as well as agricultural, biological and clinical applications. The COOL FP-501 has developed by a team of experts with more than four decades of experience in designing, manufacturing and marketing analytical instruments.

#### **Unique Design Features**

- Large, bright, color, graphic LCD display.
- Navigation Key pad on screen menus.
- Dot Matrix Printer connection provision.
- In Built SMPS.
- Removable Power Cord.

#### **Technology**

- Flame photometry is an atomic emission technique which may be regarded as simplest of atomic spectroscopic methods very similar to flame test which is applied detection of alkali metals.
- Microcontroller Based Technology.

## **Salient Features**

- Simultaneous detection of four Elements (Na, K, Ca, Li/Ba).
- Easy to use, ignition and flame optimization.
- Result of four elements within 35 seconds.
- Unmatched Accuracy and Reliability.
- Flexible and Customized as per user application.
- Data displayed in concentration units like ppm, meg etc.
- Auto fuel cut off after 30 minutes without pressing any key.
- Built in curve for accurate results like TPA, PLA, and BFC.

#### **Application**

- Pharmaceuticals.
- Soil analysis.
- Food and beverage.
- Mineral extraction.
- Chemical and Petrochemicals.
- Fertilizers.
- Clinical.
- Agricultural.
- · Biological.

# **Technical Specifications**

Range of Operation

Sodium 0-30 ppm
Potassium 0-30 ppm
Calcium 0-30 ppm
Lithium 0-30 ppm
Barium above 75 ppm

Detection

Element Detection Limits

Sodium 0.1ppm
Potassium 0.1ppm
Calcium 0.5ppm
Lithium 0.1ppm
Barium 75 ppm

Reproducibility
 1ppm - ± 10% of RSD

30ppm - ±5% RSD

Display Units/Modes
 Selectable, ppm

Typical Sample Uptake Rate 4ml/min

• Sample Consumption Approx. 1.5 ml for all 4 Elements

Aspiration Time
 Automatic

Flame Ignition
 Air Supply
 Manual with Built-in Ignition Coil
 Oil and Moisture free air @ 1.5 bar

Fuel Supply
 LPG

Nebulizer
 All Metallic axial flow type

Safety Protection Auto Fuel cut-off when Flame is unstained. Alarm provided.

Calculation
 TPA(Two Point Approximation) PLA(Piecewise Linear Approximation)

BFC(Best Fit Curve)(for non-linear working curve)

Method range
 Up to 125 Methods can be Stored

Keyboard
 22 key membrane type keys for parameter selection.

• Display Large, Backlit, Ghraphic LED(240×128 pixels)

Provision for Printer
 Power
 80 columns Dot Matrix (Optional)
 AC mains 95-270 Ac/50-60Hz

• Weight 12 Kg(approx)

• Approx. Size(in mm)  $430 \times 300 \times 235(L \times W \times H)$ 

#### **Ordering Information**

Part Number Description

250FPA05 Flame Photometer- COOL FP 501 with Accessories

\* Product specifications are subject to change without notice.



# Manufacturing facility:

## **BSR TECHNOLOGIES PVT. LTD.**

169/4, 1st Floor Mahatma Nagar, Satpur Nashik 4220007, Maharashtra India

Phone 0253-2350714

**Email:** sales@bsrtechnologies.net **Web:** www.bsrtechnologies.net