

## Technical Data

### Sample rate

2 – 3.5ml/min

### Tubing materials

Silicone and Tygon®

### Required desk space for Instrument

50cm (H) x 45cm (W) x 45cm (D)\*

For Safety reasons the Flame photometer requires 1m of unobstructed space above to allow dissipation of heat from the chimney.

### Instrument size

XP Plus Flame Photometer

51cm (H) x 39cm (W) x 35cm (D)

(20in x 15in x 14in)

### Shipping

65cm (H) x 49cm (W) x 43cm (D)

(25in x 19in x 17in)

### Weight

XP Plus Flame Photometer – 14kg (30.8lbs)

Shipping – 25kg (55.1 lbs)

### Optimal range

Single point calibration

Na 0.1 – 60ppm

K 0.05 – 100ppm

Li 0.05 – 50ppm

Ca 1.0 – 100ppm

Multi Point Calibration

Na 0.1 – 1000ppm

K 0.05 – 1000ppm

Li 0.05 – 1000ppm

Ca 1.0 – 1000ppm

### Reproducibility

<1% Coefficient of variability for 20 consecutive samples over ten minutes at concentrations of 100ppm or less. (After instrument stabilisation).

### Specificity

Na/K/Li = <1% to each other when equal in concentration at <100ppm

### Limit of detection (LOD) and limit of quantification (LOQ)

LOD	LOQ
Na – 0.03ppm	Na – 0.1ppm
K – 0.02ppm	K – 0.05ppm
Li – 0.02ppm	Li – 0.05ppm
Ca – 0.3ppm	Ca – 1ppm

### Time to stability

Less than 15 seconds after sample is introduced into the flame

### Ions measured

Simultaneous measurement of Na, K, Li, Ca

### Interfaces

USB

0-2.5 volt output (based on sample concentration linked to element of users choice)

Optional 4-20mA output in place of the above

Optional integrated printer

.csv and .pdf generated reports and files via

FP-PC software

### Recommended minimum warm up time based on ambient temperature

21°C – 25 minutes

### Power requirements

100V – 250V AC at 50 or 60Hz automatically selecting

### Fuel requirement

Propane, Butane or Natural Gas\*

regulated to 19Bar. Flow rate of 0.4l/min

\*with modifications. BWB Technologies recommends either Propane or Butane for optimum results.

### Readout

LCD, four line, alpha numeric, back lit.