BWB Technologies

Li 3 Na 11 K 19 Ca 20 XP PLUS

The Award Winning **BWB XP Plus**

A five channel digital Flame Photometer

Ready to use straight out of the box! Enhanced Purpose Flame Photometer

The BWB XP PLUS was designed around the BWB-XP providing enhanced functions to give more utility while maintaining the unsurpassed levels of accuracy, usability and reliability while significantly reducing analysis time. Our customers do not need to waste valuable time changing filters and re-calibrating when a different measurement is required, as is a common requirement in all other Flame Photometer designs from 1951 to the present.

The BWB XP PLUS is the first and only 5 channel flame photometer with simultaneous detection and display of Sodium, Potassium, Lithium, and Calcium with an option to use either Caesium or Lithium as an Internal Reference System (IRS) that acts as an internal standard to adjust small changes during calibration and measuring.

With clean lines and contemporary bright colour schemes, the XP PLUS looks exceptionally modern and will fit into any laboratory. The instrument has a large LCD display, which can be viewed easily from a wide angle.

Our metal casework provides a sturdy portable instrument and enables future recycling opportunities. ROHS compliant components and materials are used wherever possible. The BWB Carbon Footprint is exceptionally low, in keeping with corporate objectives of being a responsible manufacturer.

Unlike other manufacturers who charge extra for vital accessories, BWB include everything required to use the product straight out of the box. Just add Gas!! (Propane, LPG or butane)

We also provide, as standard, data sharing via USB from the BWB XP to your PC. This ties the output of the BWB Flame Emission Spectrometer (FES) to the Internet or your company intranet systems and facilitates Distributed Control which is vital for Multi-National companies, Universities and various Governmental agencies.

The BWB XP PLUS expands on the greatest advance in flame photometry for 30 years!

+ FEATURES

- SIMULTANEOUS DETECTION AND DISPLAY OF ALL 5 ATOMS OF INTEREST
- "IRS" (INTERNAL REFERENCE STANDARD) CAESIUM OR LITHIUM OPTION
- INTUITIVE USER INTERFACE FOR TRUE EASE OF USE
- DISPLAY PROMPTS STEP BY STEP OPERATION
- BUILT-IN AIR COMPRESSOR
- SOLUTIONS AND LABWARE INCLUDED
- DATA SHARING VIA PC LINK VIA USB
- OPERATOR INDEPENDENT DETERMINATION OF RESULTS
- 5 USER SELECTABLE UNITS OF MEASURE
- USER SELECTABLE DECIMAL PLACES
- INTEGRATED PRINTER OPTION USES READILY AVAILABLE PAPER
- IQ, OQ, PQ WEB-BASED CERTIFICATION AVAILABLE: IQ OQ PQ is completely unique in the analytical instrumentation arena. Available in English, Russian, German, Mandarin, French and Spanish. More languages in development.
- CORRECTION OF CA FOR THE INTERFERENCE FROM HIGH LEVELS OF NA

Just Add Gas

Technical Data

Just Add Gas

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 = <0.5% 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
70°C - 20 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.

+ WHAT'S IN THE BOX

- PC leads USB and RS232
- Power lead to suit region
- Gas hose
- Aspiration kit
- Manuals covering all aspects of the XP Plus FP

- Quick start guides
- Warranty registration form
- Certificates of analysis for all provided fluids
- Material safety data sheets for all provided fluids
- The FP-PC Software installation USB

- 150ml of BWB recommended cleaning solution
- 150ml calibration fluids for 4 elements at 10,000ppm
- 150ml Cs 10,000ppm calibration standard for IRS
- 100ml conical flask with screw lid
- 100 disposable sample cups

- 1L of de-Ionised water
- 2m of waste tube
- Set of spare fuses
- 10 x 10ml pipettes
- 10 x 1ml pipettes

Proudly Engineered and Manufactured in England

www.bwbtech.com