



BINB Flame Photo

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 any 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.







Technical Data

Just Add Gas

Sample rate 3.5 - 7ml/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 38cm (W) x 41cm (D) (20in x 14in x 16in) Shipping 62cm (H) x 55cm (W) x 47cm (D) (24in x 22in x 19in)

Weight

XP Plus Flame Photometer - 15.3kg (33.7lbs) 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

lons measured

Simultaneous measurement of Na, K, Li, Ca

Interfaces

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 - 40 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 0.41/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
- Selection of 3 Power cables to suit
 of the XP Plus FP all regions (4th option for China)
- Gas Hose
- Aspiration Kit
- IQ, OQ, PQ documentation



- Manuals covering all aspects
- Quick Start guides
- Warranty Registration Form
- Certificates of analysis for all provided Fluids
- Material Safety Data Sheets for all provided Fluids

www.bwbtech.com

4 elements at 10,000ppm. • 100ml conical flask with screw lid

The FP-PC Software installation

• 1L of BWB recommended

• 150ml calibration fluids for

cleaning solution

• 100 disposable sample cups





Manufactured in Newbury, County of Berkshire, England.

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