

## BWB LI

### The most accurate lithium flame photometer ever manufactured!

BWB Flame Photometers have always been renowned for a highly stable and accurate lithium measurement. This winning formula has been developed further with specific adaptation and optimisation of the proprietary BWB optical array detection systems.

A well earned thank you to Dr. Richard Roman of the University of Mississippi for his invaluable assistance on this Lithium specific FES.

The BWB Li uses multiple lithium detection channels. This latest configuration has been exclusively designed to specifications laid out through consultation with our customers.

The BWB Li is the first of it's kind. Engineered with a single purpose, the BWB Li is the most accurate and advanced lithium flame photometer (FES) ever manufactured!



#### + FEATURES

- MULTIPLE LITHIUM DETECTION CHANNELS FOCUSED FOR HIGH ACCURACY LITHIUM MEASUREMENTS
- "IRS" (INTERNAL REFERENCE STANDARD) AVAILABLE
- BUILT-IN AIR COMPRESSOR
- SOLUTIONS AND LABWARE INCLUDED
- USER SELECTABLE DECIMAL PLACES
- INTUITIVE USER INTERFACE FOR TRUE EASE OF USE
- DISPLAY PROMPTS STEP BY STEP OPERATION
- BUILT-IN AIR COMPRESSOR
- DATA SHARING VIA PC LINK WITH BWB'S FP-PC APP
- IQ, OQ, PQ WEB-BASED CERTIFICATION AVAILABLE



*Just Add Gas*

## Technical Data

*Just Add Gas*

**Sample rate**  
3.5 - 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 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 Flame Photometer - 15.3kg  
Shipping - 25kg

**Optimal range**  
Single point calibration  
Li 0.05 - 50ppm

Multi Point Calibration  
Li 0.05 - 1000ppm

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

**Chemical Interference**  
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  
Li - 0.02ppm          Li - 0.05ppm

**Time to stability**  
Less than 15 seconds after sample is introduced into the flame

**Ions Measured**  
4 independent Li channels, each providing up to 14 points of calibration

**Interfaces**  
USB

0-1 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 0.4l/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
- Selection of 3 Power cables to suit all regions (4th option for China)
- Gas Hose
- Aspiration Kit
- Manuals covering all aspects of the Lithium 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
- 1L of BWB recommended cleaning solution
- 3x 150ml calibration fluids at 10,000ppm
- 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



**www.bwbtech.com**

Manufactured in Newbury, County of Berkshire, England.  
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