

BWB SUGAR

Redefining Sugar refining from beet or cane

In keeping with the Globally accepted published papers from 1977 forward, potassium and sodium detection is now available online 24/7 with a Uniquely configured channel of detection for extreme accuracy along the range of potassium control.

This winning proprietary format has been improved with a unique adaptation and optimisation of the proprietary BWB optical array detection systems, which in this iteration of the BWB Specialty Flame Photometers allows for a single channel of precise and accurate potassium and sodium measurement.

This Specialty Flame Photometer has been requested and designed for the global Sugar Production marketplace. There were a few traditional Flame Photometer manufacturers over the decades who had served this market and now these robust and fantastic units are coming out of service.

Enter the BWB SUGAR Flame Photometer with specialised potassium and sodium channel detection, supplied with hybridised specific needs multiple point calibration solutions for potassium and sodium. Per our customers' requests, our Collection Cup provides Real Time sample access for our mixing chamber/detection systems and only requires that the sample be at or near ambient temperature and customer provided ~5ml/minute feed to our unique "Collection Cup" system.

FP/PC APP

This totally unique BWB feature allows multiple installations details to be shared via intranet or internet links to provide "Distributed Control" via a single Control room with staff completely remote from the Refinery site itself. For large Sugar Companies with multiple sites around the world, this allows Expertise from a centralized location anywhere in the world with real time virtually limitless data accumulation and analysis.

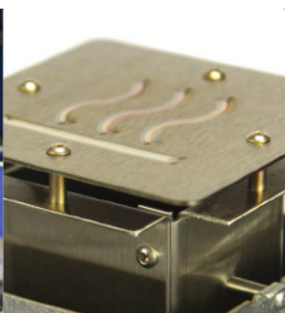
.csv files allow users to construct novel and proprietary Excel spread sheets and to share data quickly and efficiently.



+ FEATURES

- UNIQUELY HYBRIDIZED BWB DUAL CHANNEL, FOCUSED FOR HIGH ACCURACY POTASSIUM AND SODIUM MEASUREMENTS
- "IRS" (INTERNAL REFERENCE STANDARD) AVAILABLE
- 4-20MA 2 WIRE OUTPUT COMPATIBLE WITH SCADA SOFTWARE
- LIVE ONLINE MONITORING
- CONSTANT CONDENSATION STREAM FEEDS WITH USE OF THE PROPRIETARY BWB COLLECTION CUP
- BUILT-IN AIR COMPRESSOR; PIONEERED BY BWB TECHNOLOGIES IN 2007 AND PROVEN NOW WITH OVER 1000 UNITS IN GLOBAL FIELD USE
- SOLUTIONS AND LABWARE INCLUDED; "JUST ADD GAS", THE HALLMARK OF THE USER FRIENDLY BWB FLAME PHOTOMETER (FES) PROGRAM
- SPECIALIZED CALIBRATION "READY TO USE" SOLUTIONS SUPPLIED AT 1, 5, 10 AND 20PPM
- USER SELECTABLE DECIMAL PLACES
- INTUITIVE USER INTERFACE FOR TRUE EASE OF USE
- DISPLAY PROMPTS STEP BY STEP OPERATION
- DATA SHARING VIA PC LINK WITH BWB'S FP/PC APP

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

Sugar 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

Nuclear Flame Photometer – 15.3kg
Shipping – 25kg

Optimal range

Single point calibration
Na 0.1 – 60ppm
K 0.05 – 100ppm

Multi Point Calibration

Na 0.1 – 1000ppm
K 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 |
|--------------|-------------|
| Na – 0.03ppm | Na – 0.1ppm |
| K – 0.02ppm | K – 0.05ppm |

Time to stability

Less than 15 seconds after sample is introduced into the flame

Ions measured

Potassium
Sodium

Interfaces

USB
4-20mA output capable of direct link to SCADA systems
Optional integrated printer
.CSV and .PDF generated reports and files via FP-PC software
Collection Cup providing 24/7 live automated sampling*

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 Sugar 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
- 150ml calibration fluids for sodium at 10,000ppm.
- 250ml calibration fluids of potassium at 1, 5, 10 and 20ppm
- 100ml conical flask with screw lid
- 100 disposable sample cups
- 1L of De-Ionis
- 2m of waste t
- Set of spare f
- 10 x 10ml pipet
- 10 x 1ml pipet



PROUDLY MANUFACTURED
AND ENGINEERED IN THE
UNITED KINGDOM

www.bwbtech.com

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*Subject to change without notice based on local regulations and distributor

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