



Portable Tritium Bubbler Model NPP3XS

SILENT BRUSHLESS SAMPLE PUMP

(See Specifications)

Accurate: Great Sensitivity

**No False Positive Measurements
High Collection Efficiency**

Efficient: Compact, Versatile, Easy to Use

**Standard, Low Cost Collection Bottles
Provides Redundant Analyses**

Reliable: Long-life, Ultra-quiet Reliable Pump

**Stainless Steel Impingers
Accurate Flow & Total Volume**



Benefits

- ❑ Ultra sensitive HTO measurement via separate Liquid Scintillation
 - High HTO collection efficiency with ethylene glycol under specified conditions
 - High accuracy flow integration
- ❑ High accuracy flow measurement and integration
 - Pump provides very long life, low noise, smooth vacuum, and high efficiency
 - Operator selectable Standardized or Actual flow measurement and integration
 - Integration of flow rate over time provided as real-time accumulated total sample volume
- ❑ Designed, Manufactured, and Supported by the Tritium Experts at MoundTech
 - Developers of tritium bubbler technology in 1970s
 - Comprehensive support for application, operation, maintenance, & measurement
 - One (1) year warranty – ask for details
- ❑ Sample for both short sample periods (10 minutes to 3 hours) AND long term continuous sampling (24 hours to 7 days)
- ❑ Key protected RESET of the sample totalizer nulls the total volume sampled over the collection period by use of removable key to prevent the accidental loss of collection data.

Specifications

DIMENSIONS: 10.5"H × 11.1"W × 15"D (less collection bottles) (26.7cm H × 28.2cm W × 38.1cm D)

WEIGHT: 13 lbs. (6 kg)

POWER: Universal, accepts 100-240 VAC, 50/60 Hz, 600W, single phase

PUMP: Brushless Long Life, Silent (Sound Level: 41 to 51dBA: Bubbling can be heard over pump)

FLOW CONTROL: Easily adjustable, precision, electronic sample pump flow rate adjustment

FLOW MEASUREMENT: User adjustable at any time from 0.1 to 5.0 LPM range
Accuracy: ± 4% F.S. ALPM, ± 5% F.S. SLPM
Actual (ALPM) based on ambient temperature and pressure
Standardized (SLPM) based on 20°C and 760 mmHg

CUMULATIVE SAMPLE VOLUME: Displayed as XXXX.X L, automatically integrated over sample time

TEMPERATURE: ± 0.5°C (for calculation-not displayed)

ABSOLUTE PRESSURE: ± 0.5 mmHg (for calculation-not displayed)

OPERATING TEMPERATURE: 0° - 40°C with ethylene glycol, 5 - 40 °C with water, -10°C - 50°C store

OPERATING HUMIDITY: 0-95% RH non-condensing

DATA PROTECTION: Data preserved during power loss or accidental power down, auto restore

COMMUNICATIONS INTERFACE OPTION: USB option available but not required

THREE AUTOMATED SAMPLE MODES:

- 1) Automatically end sampling after present sample period (10 minutes to 168 hours)
- 2) Automatically end sampling after present total volume sampled
- 3) Manually end sampling at discretion of operator

Stainless Steel Collection Bottle Train (3 bottle impinger assembly for collection bottles)

- Highly durable for longer service life than degradable plastic and protects against leakage
- Collection bottle exchange is very easy, convenient, and cost efficient

Collection Bottles are standard 225 ml bottles

- Collection bottles should not be reused after a collection period as this can introduce contamination from previous sample into following sample producing inaccurate samples
- Standard globally available consumable bottle product, no requirement to purchase from MoundTech, and are very cost efficient
- 225ml bottles assure highly efficient collection due to longer residence time and larger volume