

Digital Buret™ III

The BRAND Digital Buret™ III bottle-top burette makes routine titrations faster, easier, and more reliable than with cumbersome glass burettes. An economical, easy-to-use alternative to costly titrating units, it is excellent for labs with multiple users. The Digital Buret™ III is compatible with most titrating solutions up to 2mol/L, making it popular for general chemistry, wastewater treatment applications, food/beverage analysis, industrial titrations, environmental fieldwork, and more.

- **Displays Results Quickly and Clearly:** The instrument features a large LCD that clearly shows the titrated volume to eliminate meniscus-reading errors.
- **Simplifies Calibration:** The Digital Buret™ III features Easy Calibration™ technology to facilitate in-lab calibration, simplify ISO/GLP compliance, and ensure accurate results throughout the life of the instrument.
- **Improves Laboratory Safety:** The Digital Buret™ III is equipped with numerous safety features, including an integral safety discharge system, to reduce the risk of inadvertent dispensing and splashes. It mounts directly on the reagent bottle to reduce the risk of spills from user handling of solvents.
- **Cordless:** The instrument is supplied with an environmentally-friendly, long-life lithium battery that will power approximately 60,000 titrations (50 a day for 5 years) without recharging.



**The world's first and most trusted
bottle-top burette.**



Digital Buret™ III bottle-top burette

Large Display

Immediately displays titrated volume which eliminates meniscus reading errors and increases productivity.

Easy Calibration™

The Digital Buret™ III features BRAND's Easy Calibration™ system. For more details, see page 47.

Control Keys

Two keys control all microprocessor functions.

SafetyPrime™ Valve

Recirculating valve eliminates reagent waste and reduces spurring during priming. Control lever clearly indicates valve position.

Large Hand Wheels

Non-slip hand wheels provide variable titration speed for total control of titration rate, from steady stream to drop-by-drop.

Safety Discharge System

Reduces the risk of inadvertent dispensing if the discharge tube is damaged or removed, increasing operator safety.

Fits common bottles

The Digital Buret™ III comes with a 45mm thread and adapters to fit most common reagent bottles. Additional adapters are available. See page 49.

Telescoping Filling Tube (inside bottle)

Adjusts easily to a broad range of bottle sizes. No measuring or cutting is required!

Safety screw cap

Reduces accidental reagent contact. One-twist cap is easy to attach and remove, even while wearing gloves.



Digital Buret™ III bottle-top burette

Simple Operation



Easy Reading

The large LCD clearly shows titrated volume. There's no risk of meniscus reading errors.

Simple cleaning

The valves may be easily removed for cleaning. It's simple to maintain your instrument, even with solutions that tend to crystallize.

Titration Made Easy

- To fill the instrument, flip the key to "Fill" and rotate the handwheels to raise the piston.
- To titrate, flip the key to "Titr." and turn the handwheel to dispense liquid. To zero the instrument, press "clear".

Fast Results

The titrated volume is continuously displayed for accurate measurements once the endpoint has been reached.



Chemical Compatibility

The Digital Buret™ III is compatible with the following titrating agents up to a concentration of 2mol/L

Acetic acid	Potassium hydroxide solution
Alcoholic potassium hydroxide solution	Potassium iodate solution
Ammonium iron (II) sulfate solution	Potassium permanganate solution
Ammonium thiocyanate solution	Potassium thiocyanate solution
Barium chloride solution	Silver nitrate solution
Bromide bromate solution	Sodium arsenite solution
Cerium (IV) sulfate solution	Sodium carbonate solution
EDTA solution	Sodium chloride solution
Hydrochloric acid	Sodium hydroxide solution
Iodine solution	Sodium nitrite solution
Iron (II) sulfate solution	Sodium thiosulfate solution
Nitric acid	Sulfuric acid
Oxalic acid solution	Tetra-n-butylammonium hydroxide solution
Perchloric acid	Zinc sulfate solution
Potassium bromide bromate solution	
Potassium bromate solution	
Potassium dichromate solution	

This partial list reflects testing completed prior to publication of this catalog. For information on reagents not listed, please contact us.

Digital Buret™ III bottle-top burette

Easy Calibration™

ISO 9001

ISO 9001 and GLP guidelines require routine evaluation and recalibration of measuring instruments using standard operating procedures (SOPs) approximately every 3-12 months. This cumbersome task is facilitated with the Easy Calibration™ technology in the Digital Buret™ III.

Example

Gravimetric testing of a 25mL Digital Buret™ III indicates a delivered volume of 24.94mL, possibly due to reagent viscosity. Calibration adjustment is performed simply in less than a minute.

1

Hold the "Clear" key until <CAL> appears in the display.

**2**

Press the "Clear" key repeatedly until the measured value (24.94mL) appears in the display.

**3**

Press the "Titr." key to confirm the input. The word <DONE> briefly appears on the display.

**4**

Done!
The Digital Buret™ III is now recalibrated to your specific working conditions. Alteration from original factory setting is identified by <CAL> on display.

**Calibration Options**

- Standard Operating Procedures (SOPs)**
Free detailed SOPs with essential information on the monitoring of measuring instruments to ISO 9001 and the GLP guidelines.
- Calibration Service**
Call BrandTech Scientific at 888-522-2726 for factory authorized calibration.
- BRAND's EASYCAL™**
Easy Calibration™ is even easier with EASYCAL™ software from BRAND. Windows®-based calibration software includes SOPs for all BRAND liquid handling products. Order a free demo-version of EASYCAL™ including SOPs directly from BrandTech. (See page 50)



Easy Calibration™ is even easier with EASYCAL™ software from BRAND. SOPs and a free demo-version of EASYCAL™ can be ordered directly from BrandTech.

Digital Buret™ III bottle-top burette

Technical data

Operating limits

- Liquids unsuitable for use with the Digital Buret™ III include, but are not limited to, concentrated strongly crystallizing solutions, fuming acids, and fuming bases. Dispensers for these solutions may be found on pages 30-43.
- Temperature of instrument and reagents must be between 59° and 104°F (15° and 40°C).
- The Digital Buret™ III cannot be autoclaved.

Certified

Every Digital Buret™ III is subjected to a thorough calibration check before leaving the factory. Each instrument is supplied with a serial number and individual performance certificate to document its accuracy and coefficient of variation.

Items supplied

The Digital Buret™ III includes:

- Telescoping filling tube (195–350mm)
- Valve mounting tool
- SafetyPrime™ valve
- Fine tip titrating tube (120mm horiz./195mm vert.)
- Three polypropylene adapters (45/33mm, 45/38mm and 33/STJ29-32)
- Certificate of performance
- Operating manual
- One-year warranty

Digital Buret™ III with optional short titrating tube



ORDERING INFORMATION

	Accuracy within* ≤ ±		Coefficient of Variation* ≤		Resolution (mL)	Cat. No.	2007 List Price
	µL	%	µL	%			
Digital Buret™ III							
25mL	50	0.2	25	0.1	0.01	4751151	\$795.00
50mL	100	0.2	50	0.1	0.01	4751161	795.00
Digital Buret™ III with drying tube							
25mL	50	0.2	25	0.1	0.01	4751051	825.00
50mL	100	0.2	50	0.1	0.01	4751061	825.00

* Final test values relative to the nominal capacity (maximum volume) indicated on the instrument, obtained when instrument and distilled water are equilibrated at the ambient temperature (68°F/20°C) and with smooth operation. The absolute error at DIN 12650-2 of 0.3% of the nominal capacity is not exceeded at any partial volume.

Accessories



PTFE Seals

For filling, discharge and SafetyPrime™ valves.
Pack of 5 of each type.



Filling valve

With sealing washer.
Each.



Micro-valve titrating tube

The optional micro-valve titrating tube allows titrating directly into the sample, without drop formation. This allows titration with greater precision.
Each.



Drying Tube

The optional drying tube protects sensitive titrants from humidity or CO₂. Requires drying agent (not included).
Each.

ORDERING INFORMATION

Description	Cat. No.	2007 List Price
PTFE Seals	6696	\$15.00
Filling valve	6697	32.00
Micro-valve titrating tube, 125mm horiz./75–250mm vert. (= 4.9" horiz./2.9–9.8" vert.)	707522	62.00
Short titrating tube, fine tip, 165mm horiz./75mm vert. (=6.5" horiz./2.9" vert.)	707524	44.00
Tall titrating tube, fine tip, 120mm horiz./195mm vert. (= 4.7" horiz./7.7" vert.)	707520	61.00
Drying tube	707930	32.00
Telescoping filling tube, 125–240mm, (=4.9"–9.5")	704203	12.00
Telescoping filling tube, 195–350mm, (=7.7"–11.8")	704208	21.00
Telescoping filling tube, 250–480mm, (=9.8"–18.9")	704201	15.00
Bottle thread adapter (PP)		
33/28mm, pack of 3	2704822	14.00
45/33mm (for most 1L bottles), pack of 3	2704828	14.00
45/38mm (for most 4L bottles), pack of 3	2704827	14.00
45/540mm, pack of 3	2704829	14.00
Adapter set, (PP) one each: thread 33/24mm, 33/28mm, 45/33mm, and 45/38mm	2704870	19.00
Bottle thread adapters for ground glass bottles		
STJ 19/32	2704836	19.00
STJ 24/40	2704838	19.00
STJ 29/42	2704840	23.00



Adapters

Manufactured from polypropylene (PP). Select from adapters for threaded or ground glass bottles (STJ). Pack of 3 (STJ adapters, each).