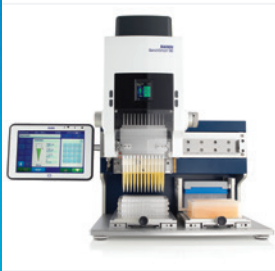BenchSmart 96

RAININ
Pipetting 360°

Faster, Better Workflows
Semi-Automated 96-Well Pipetting

Maximum Flexibility
With three quick-change pipetting heads, BenchSmart is certain to become one of your most versatile and useful laboratory assistants. The 0.5-20 µL head provides excellent range at smaller volumes, the 5-200 µL head suits most day-to-day work and the 100-1000 µL head is perfect for sample preparation and cleanup.
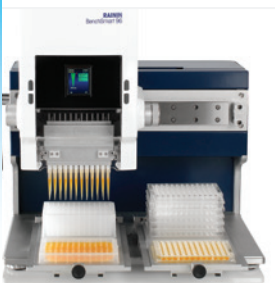
High Reliability
For complex protocols and precise liquid handling, nothing beats automation for accurate and consistent aspiration and dispensing. Add BenchSmart's industry-leading specifications and extraordinary ease of use, and you can expect higher reliability and repeatability for your experiments.

Greater Efficiency
BenchSmart's wide range of application modes – from basic pipetting to advanced features like multi-dispense – make programming a snap. The large touchscreen and intuitive interface make it easy to design, execute and save any protocol, from simple one-step procedures to complex, multi-step experiments.

Simplicity
BenchSmart is so intuitive, anyone in the lab can use it. The four-plate layout also simplifies workflows by reducing, if not eliminating, the need to swap out tips and reservoirs. For example: a two solution protocol requires just four liquid handling steps with BenchSmart vs. nine steps on a two-tray system.

BenchSmart™ 96
Semi-automated 96/384-well pipettor

BenchSmart 96 is a semi-automated 96/384-well pipettor with three interchangeable pipetting heads, giving it a range of 0.5 µL to 1000 µL. The touch-screen display controls aspiration, dispense, tip loading and ejection. Pipetting modes include Basic, Advanced, Dilute, Multi-dispense, Reverse, Volume Sequencing, Mix and Cycle Count.

The LTS® LiteTouch tip system assures a perfect seal on all 96 nozzles and prevents tips from jamming or falling off. All Rainin LTS high-throughput tips are BioClean and therefore guaranteed to be free of RNase, DNase, DNA, ATP and pyrogens.

METTLER TOLEDO

BenchSmart 96
Faster, Better Workflows

- Renowned METTLER TOLEDO quality, accuracy and precision
- Touch-screen tablet control
- Three interchangeable heads for versatility: 0.5 -1000 µL volume ranges
- Motor-drive for automatic aspiration, dispense, tip loading/unloading
- Basic, Advanced, Multi-dispense, Dilute and Reverse modes
- Fixed Volume, Volume Sequencing, Mixing, Count, AutoPace, Blowout
- Mode-Option combinations savable as Mode Presets
- Ideal for proteomics, genomics, glycan and kinetic applications
- Equipped with LTS technology for perfect tip fit, low nozzle maintenance
- Tips are guaranteed free from RNase, DNase, DNA, ATP, and pyrogens
- Tips are available standard, presterilized, and presterilized with filters

A touchscreen and clear graphic menus are so intuitive, the BenchSmart 96 requires little – if any – training.

Performance Specifications

Head size	Low Volume 0.5-20 µL	Mid Volume 5-200 µL	High Volume 100-1000 µL
Channel Accuracy (Systematic Error)	20 µL: ± 1% (0.2 µL) 10 µL: ±1.2% (0.12 µL) 2 µL: ± 6% (0.12 µL) 1 µL: ± 12% (0.12 µL)	200 µL: ±1% (2 µL) 100 µL: ±1% (1 µL) 20 µL: ± 2% (0.4 µL) 5 µL: ± 5% (0.25 µL)	1000 µL: ±1% (10 µL) 500 µL: ±1% (5 µL) 100 µL: ± 2.5% (2.5 µL)
Channel Precision (Random Error)	20 µL: ≤ 0.8% (0.16 µL) 10 µL: ≤1.0% (0.1 µL) 2 µL: ≤5% (0.1 µL) 1 µL: ≤10% (0.12µL)	200 µL: ≤0.4% (0.8 µL) 100 µL: ≤0.8% (0.8 µL) 20 µL: ≤1.5% (0.3 µL) 5 µL: ≤3.5% (0.18 µL)	1000 µL: ≤0.4% (4 µL) 500 µL: ≤0.4% (2 µL) 100 µL: ≤1.25% (1.25 µL)
Volume Increments	0.02 µL	0.2 µL	1 µL

Ordering Information

MT-Order No.	Description
30296705	BenchSmart 96 20 µL
30296706	BenchSmart 96 200 µL
30296707	BenchSmart 96 1000 µL
30296708	Head, BenchSmart 96 20 µL
30296709	Head, BenchSmart 96 200 µL
30296780	Head, BenchSmart 96 1000 µL

Rainin, LTS, LiteTouch and Pipetting 360° are registered trademarks, and BenchSmart is a trademark of Mettler-Toledo Rainin LLC.

Footprint Specifications

Instrument Part	Measurements
Main Plate (without arm)	447 mm (17.6 in.) wide x 356 mm (14 in.) deep x ~559 mm (~22 in.) high with head in highest position
Main Plate (with arm)	660 mm (26 in.) wide x 356 mm (14 in.) deep x ~559 mm (~22 in.) high (the tablet on the arm needs 26 inches in width to swing)
Instrument Weight	23 kg (58 lbs.) total, including the tablet and the head
Head Weight	2.3 kg (5.2 lbs.)
Tablet + Arm Weight	0.9 kg (2 lbs.)

www.mt.com/rainin

For more information