TECHNICAL DATA SHEET

ALab™ dTrite-Pro Electronic Titrator

Electronic bottle-top titrator · 10 / 25 / 50 mL · touchscreen and remote handle · ISO 8655



ALab™ dTrite-Pro Electronic Titrator

The ALab™ dTrite-Pro electronic titrator; image shown for reference.

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SECTION I

Product Overview

The ALab™ dTrite-Pro is a touchscreen electronic bottle-top titrator for acid-base, redox, precipitation and complexation titration, in three sizes with a maximum of 10, 25 or 50 mL per aspiration and a volume range up to 99.999 mL. The quality control standard is ISO 8655.

The electronically driven piston has a minimum volume of 10 µL for the 10 mL size and 20 µL for the 25 mL and 50 mL sizes. Titration is set on the 4.3-inch touchscreen and run remotely with the dedicated operating handle; a 0 to 90° rotary valve, clear and brown windows, drying tubes and free PC software are standard.

SECTION II

Core Advantages

- **Minimum volume** — 10 / 20 µL, by size
- **Modes** — 3 discharge, 2 suction
- **Windows** — clear and brown
- **Control** — touchscreen and remote handle
- **Valve** — 0 to 90°, exhaust and return
- **Software** — free PC software

SECTION III

Specifications

Technical data — dTrite-Pro

Specifications	
Brand	ALab™ by ACS Material
Model	dTrite-Pro
ACS Cat. No.	Parent ALDTRP; ALDTRP01 to ALDTRP03
Product type	Electronic bottle-top titrator
Sizes	10 mL, 25 mL, 50 mL
Volume range	0.010 (10 mL size) or 0.020 (25 and 50 mL sizes) to 99.999 mL
Max. volume per aspiration	10, 25 or 50 mL
Suction / discharge speed	10 levels; 0.5 to 5 mL/s (10 and 25 mL), 1 to 10 mL/s (50 mL)
Stirring speed	5 levels
Rotary valve	0 to 90°, rapid exhaust and reagent return
Windows	Clear and brown (standard)
Drying tubes	Standard (absorbent not included)
Control type	Remote support, including stirrers and titration programs
Operating temperature range	10 to 30°C
Quality standard	ISO 8655
Display	4.3-inch TFT touchscreen, 800 × 480 resolution
Memory	1000 records
Battery capacity	3500 mAh
PC software	Free, for upstream control

Sizes and volumes

Size	Volume range	Max. per aspiration	Min. volume	Suction / discharge speed	ACS Cat. No.
10 mL	0.010 to 99.999 mL	10 mL	10 µL	0.5 to 5 mL/s	ALDTRP01
25 mL	0.020 to 99.999 mL	25 mL	20 µL	0.5 to 5 mL/s	ALDTRP02
50 mL	0.020 to 99.999 mL	50 mL	20 µL	1 to 10 mL/s	ALDTRP03

Accuracy and precision

Size	Subvolume (mL)	Systematic error R (%)	Systematic error R (µL)	Variation coefficient CV (%)	Variation coefficient CV (µL)
10 mL	10	0.2	20	0.07	7
	5	0.4	20	0.14	7
	1	2.0	20	0.7	7
25 mL	25	0.2	50	0.07	17.5
	12.5	0.4	50	0.14	17.5
	2.5	2.0	50	0.7	17.5
50 mL	50	0.2	100	0.05	25
	25	0.4	100	0.10	25
	5	2.0	100	0.5	25

Listed accessories

Accessory	Part No.
Reagent bottle base holder	17001682
Refill support base	17001681
Liquid refill funnel	17001680
Liquid refill base	17001679
Refill funnel	17900433
pH meter	17900519
Color sensor	17900541

Scope of delivery

— Standard configuration: dTrite-Pro electronic titrator of the selected size, clear and brown windows, drying tubes (absorbent not included).

SECTION IV

Applications

Acid-base, redox, precipitation and complexation titration in chemical, pharmaceutical, food, environmental and quality-control laboratories.

Choose the size by the titrant volume per aspiration. Use the brown window for light-sensitive titrants. Specifications are per the tables above.

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