LAMBDA
LABORATORY INSTRUMENTS

LAMBDA DOSER *touch*

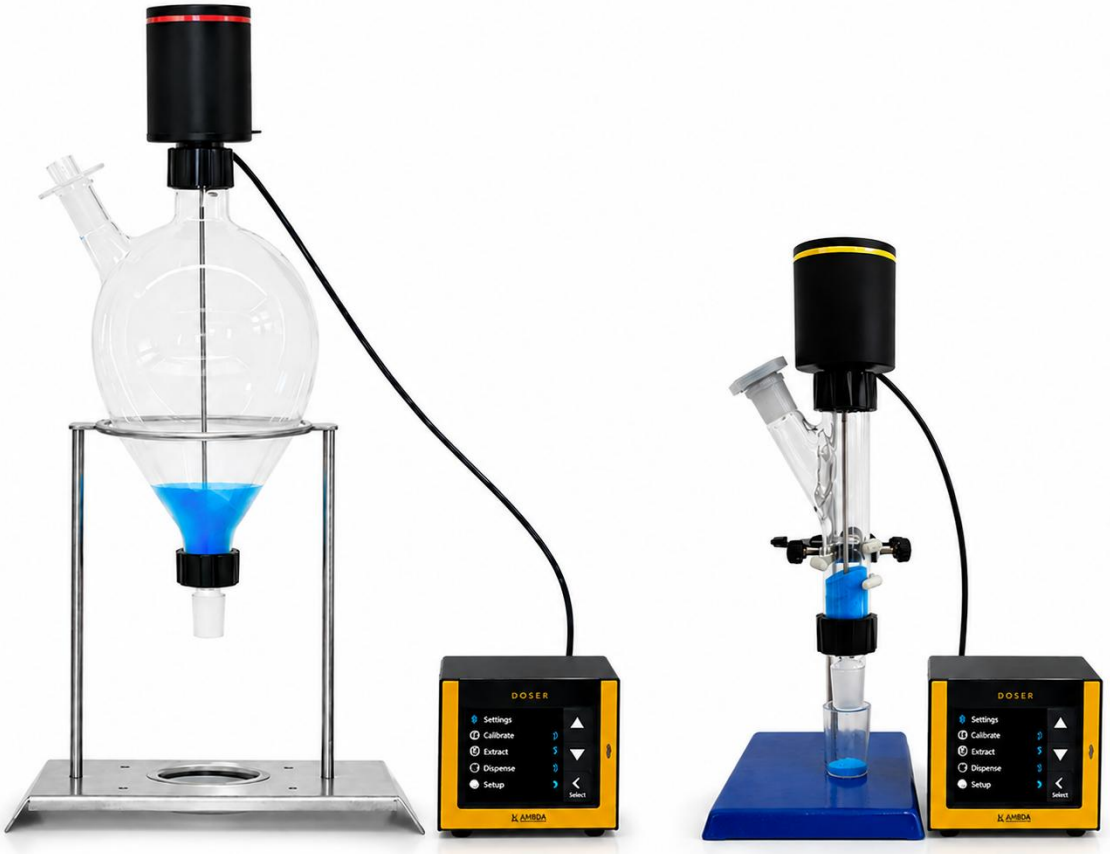
PROGRAMMABLE DOSER / FEEDER

WORKING PRINCIPLE

At the core of the system is a quartz-controlled motor, similar to those used in high-precision electronic watches. This ensures stable operation and reliable, repeatable powder feeding.

Unlike conventional screw-based feeders, which can compress powders and lead to clogging, the LAMBDA DOSER touch uses an **open spiral distributor**. This design avoids compression and allows the material to flow smoothly.

The spiral gently moves the powder toward the center, where it is released by gravity. This results in reliable, clog-free, and **consistent dosing**.



DOSER *touch* - Smart, precise dosing of free-flowing powders

Dose Rate: ~10 mg/min to 250 g/min

Dosing range varies by distributor type; the standard DOSER *touch* operates from ~**50 mg/min to 250 g/min**.

Modular Distributor Kit (Optional)

Standard distributor
~50 mg/min – 250 g/min

Standard (Very fluid powder)
~50 mg/min – 250 g/min

Standard (2× reduced speed)
~25 mg/min – 125 g/min

Standard (10× reduced speed)
~10 mg/min – 25 g/min

Flow rates mentioned are based on NaCl at our lab conditions

Precise & User-Friendly

Touchscreen interface: 3.5” TFT IPS display for intuitive operation and **real-time** monitoring

Advanced connectivity: **USB** for remote control, dosing program management, and software updates

Controlled powder handling: **Dose under a controlled environment** by purging inert gases like N_2. Useful while dispensing **oxygen sensitive or hygroscopic** powder

GLP-ready design: **Autoclavable glass vessel set**

Free software tool: For basic **PC control** and easy firmware updates by LAMBDA Device Manager

Different Vessel Volume: 0.2L, 1L, 3L and 6L glass vessels

TECHNICAL SPECIFICATION

Type	Microprocessor-controlled, programmable laboratory powder dispenser
Accuracy	Up to ±0.2° of distributor rotation
Volume	Approx. 0.2 L, 1 L, 3 L, and 6 L glass vessels
Dimensions	Motor unit: Ø 8 cm × 12.5 cm (H), including flange | Control unit: 10.5 cm (H) × 9.47 cm (W) × 11.57 cm (D) Glass vessel (0.2 L): 30 cm (H) × 12 cm (W) × 5 cm (D) Glass vessel (1 L): 30 cm (H) × 18 cm (W) × 14 cm (D) Glass vessel (3 L): 38 cm (H) × 21 cm (W) × 17.5 cm (D) Glass vessel (6 L): 38 cm (H) × 21 cm (W) × 22.5 cm (D)
Control methods	Fixed speed, pre-defined program, dosing by time, dosing by amount, remote mode
Flow rate	Calibratable via built-in procedure; units: g/min, g/h
Internal memory	Built-in program library with 10 programs and 100 speed items; built-in substance name library with up to 32 entries
User programs	Up to 10 programs with 100 items; step or ramp transitions between items; repeat count (infinite or up to 99×); end-of-program action options: continue with last item, repeat, or stop; independent calibration constant; independent flow rate units
Dosing range	Approx. 10 mg/min to 250 g/min, based on NaCl under laboratory conditions
Speed control range	0-9999; 1 digital speed unit = 0.004 rpm
Interface	USB 2.0, CAN bus, 0-10 V signal, RS-485, remote input (external contact)
Display	3.5-inch TFT IPS display, 320 × 240 pixel resolution, viewing angle ±70°
Conformity	Directive 2014/35/EU; Directive 2014/30/EU
Technical standards	EN 61000-6-1; EN 61000-6-4; EN 61010-1:2010/A1:2019/AC:2019-04; EN 61326-1:2013
Weight	0.8 kg
Operating temperature	0-40 °C
Operating humidity	0-90%, non-condensing
Power supply	Plug-in power adapter, 90-240 V AC, 50/60 Hz; 12 V / 2.5 A, 30 W; barrel jack 5.5/2.1 mm

For quotations, prices and further questions, please contact us at: sales@lambda-instruments.com