

TECHNICAL DATA SHEET

ALab™ MX-Pro Infrared Digital Vortex Mixer

Infrared tube detection • 100–3000 rpm • 4.5 mm amplitude • LCD speed/time display • brushless DC motor



ALab™ MX-Pro Infrared Digital Vortex Mixer

The ALab™ MX-Pro is an infrared digital vortex mixer with IR and Continuous operating modes for laboratory sample mixing. Image shown for reference.

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SECTION I

Product Overview

The ALab™ MX-Pro Infrared Digital Vortex Mixer provides an efficient and precise mixing solution for the laboratory. With advanced design concepts and manufacturing technology, the device features a sleek, streamlined, and aesthetically pleasing appearance. The digital interface provides real-time speed and time display, allowing users to easily set and monitor mixing parameters. Its stable vortex motion ensures uniform sample mixing, making it ideal for molecular biology, chemical analysis, and other scientific research fields.

The MX-Pro runs at 100–3000 rpm with a 4.5 mm amplitude and offers two operating modes: IR, in which dual-sided IR sensing provides automatic tube detection and mixing, and Continuous. The time range is 1 s – 99 min 59 s. The MX-Pro uses a brushless DC motor. Published electrical specifications are: power supply, 100–240 V at 50/60 Hz; input voltage, 24 V; power consumption, 30 W. The standard top is the VT2.2 flat rubber sleeve; a top cup, tube adapters, horizontal clamps, an ampule/tube attachment, an Erlenmeyer flask attachment, and microplate clamps are listed by catalog number.

SECTION II

Core Advantages

- **Infrared tube detection** — dual-sided IR sensing for automatic tube detection and mixing; IR and Continuous operating modes
- **100–3000 rpm, 4.5 mm amplitude** — adjustable speed from gentle to vigorous mixing to suit various needs
- **Stable, splash-resistant setup** — pressure-mounted accessories prevent slippage and splashing; sturdy base ensures stability during operation
- **LCD speed & time display** — real-time speed and time for easy adjustment and monitoring; time range 1 s – 99 min 59 s
- **Brushless DC motor** — high stability and maintenance-free operation; low noise for a quiet working environment
- **Tubes, flasks & plates** — tube adapters for 1–50 mL test tubes, horizontal clamps, ampule/tube and Erlenmeyer flask attachments, and microplate clamps

SECTION III

Specifications

Technical data — MX-Pro

Specifications	
Brand	ALab™ by ACS Material
Product Name	ALab™ MX-Pro Infrared Digital Vortex Mixer
Model	MX-Pro
SKU #	ALMXPR00
Speed	100–3000 rpm
Display	LCD
Amplitude	4.5 mm
Operating Modes	IR, Continuous
Time Range	1 s – 99 min 59 s
Motor Type	Brushless DC motor
Dimensions (L×W×H)	160 × 145 × 145 mm
Weight	3.9 kg
Power Supply	100–240 V, 50/60 Hz
Input Voltage	24 V
Power Consumption	30 W
Ambient Temperature & Humidity	5–40 °C, 80% RH
Enclosure Protection	IP21
Standard Top	VT2.2 flat rubber sleeve (Cat. No. 18901373)

Accessories — MX-S+ & MX-Pro

Accessories		
Model	Cat. No.	Description
VT2.1	18901379	Top cup, suitable for MX-Pro
VT2.2	18901373	Flat rubber sleeve (standard)
VT2.3	18901365	Universal top plate, Ø100 mm; compatible with VT1.3.1–VT1.3.12 tube adapters
VT2.4	18901366	Ampule/tube attachment, 4 ampules/tubes (0.2–15 mL)
VT2.5	18901367	Erlenmeyer flask attachment (100–250 mL); operating speed: 0–1500 rpm
VT2.6	18901368	Snap-in universal top plate, Ø85 mm; compatible with VT2.6.1–VT2.6.5 tube adapters
VT2.6.1	18901378	Tube adapter, 25 holes × 1 mL test tube
VT2.6.2	18901377	Tube adapter, 21 holes × 2 mL test tube
VT2.6.3	18901376	Tube adapter, 16 holes × 5 mL test tube
VT2.6.4	18901375	Tube adapter, 8 holes × 15 mL test tube
VT2.6.5	18901374	Tube adapter, 4 holes × 50 mL test tube
VT2.7.4	18901870	Horizontal plastic clamp, 24 holes × 1.5 mL test tube (circular plate)
VT2.7.5	18901871	Horizontal plastic clamp, 12 holes × 15 mL test tube (circular plate)
VT2.7.6	18901872	Horizontal plastic clamp, 6 holes × 50 mL test tube (circular plate)
PS2.1	18901360	Microplate clamp, suitable for full-skirt PCR plates, cell culture plates, enzyme-linked immunosorbent assay plates, deep well plates, etc.; half-skirt/no-skirt PCR plates need to be used with the rectangular foam, which is included
PS2.2	18901361	Snap-in microplate clamp, suitable for full-skirt PCR plates, cell culture plates, enzyme-linked immunosorbent assay plates, deep well plates, etc.; half-skirt/no-skirt PCR plates need to be used with the rectangular foam, which is included

Scope of delivery

- **Standard configuration:** one MX-Pro main unit with one VT2.2 flat rubber sleeve (Cat. No. 18901373).
- **Additional accessories:** specify separately in the quotation. The accessory table describes compatible configurations, not the standard packing list.

SECTION IV

Applications

For sample mixing in molecular biology, biotechnology, chemical analysis, clinical laboratories, and pharmaceutical research. Select the top for the vessel: the VT2.2 flat rubber sleeve (standard) or the VT2.1 top cup; the VT2.6 snap-in universal top plate with VT2.6.1–VT2.6.5 tube adapters (1–50 mL test tubes); the VT2.7.4–VT2.7.6 horizontal plastic clamps; the VT2.4 ampule/tube attachment; the VT2.5 Erlenmeyer flask attachment (100–250 mL; operating speed 0–1500 rpm); or the PS2.1 / PS2.2 microplate clamps.

Product value: infrared tube detection, 100–3000 rpm at a 4.5 mm amplitude, an LCD with real-time speed and time, and a brushless DC motor in a 160 × 145 × 145 mm, 3.9 kg instrument. Confirm the accessories and vessel types against your application requirements before ordering.

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