

TECHNICAL DATA SHEET

## ALab™ EcoStir Square Plate Magnetic Stirrer

*Square plate magnetic stirrer · 300–2000 rpm · 1.5 L H<sub>2</sub>O · electrode holder with clamp*



*ACS Material ALab™ EcoStir Square Plate Magnetic Stirrer*

### CONTENTS

- 01** Product Overview
- 02** Core Advantages
- 03** Specifications
- 04** Applications

### ACS MATERIAL, LLC

959 E Walnut St., Suite 100  
Pasadena, CA 91106, USA  
Phone +1 (866) 227-0656  
Fax +1 (781) 518-0284  
[contact@acsmaterial.com](mailto:contact@acsmaterial.com)  
SKU **ALECSTSQ**  
Revision Date **09/24/2026**

## SECTION I

## Product Overview

The ALab™ EcoStir Square Plate Magnetic Stirrer stirs up to 1.5 L of water on a 120 × 115 mm PET plate. Speed is set on a scale from 300 to 2000 rpm, and the plate takes a magnetic bar up to 40 mm. A holder with clamp for a pH electrode or other sensor is part of the model, so a reading can be taken in the vessel while it stirs. Drive is a maintenance-free brushless DC motor with 1.2 W output; rated power is 7.2 W. The instrument runs from 100–240 V, 50/60 Hz mains or a 12 V DC supply, measures 150 × 144 × 54 mm and weighs 0.3 kg. Heating is not part of this model's specification. See the specification note for what these figures cover.

## SECTION II

## Core Advantages

|                                                                                                                                                                          |                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| — <b>Holder and clamp as part of the model</b> — takes a pH electrode or other sensor in the stirred vessel, so a reading can be taken without building a separate stand | — <b>1.5 L of water on a 150 × 144 mm footprint</b> — 120 × 115 mm PET work plate; instrument 150 × 144 × 54 mm and 0.3 kg   |
| — <b>Mains or 12 V DC</b> — 100–240 V, 50/60 Hz or DC 12 V, for work where the bench is a vehicle or a field cabin                                                       | — <b>Maintenance-free brushless drive</b> — brushless DC motor, 1.2 W output, under a PET top chosen for chemical resistance |

## SECTION III

## Specifications

### Technical data

| Specifications                          |                                                    |
|-----------------------------------------|----------------------------------------------------|
| Working Plate                           | 120 × 115 mm, PET                                  |
| Drive                                   | Brushless DC motor · 1 stirring position           |
| Max. Stirring Volume [H <sub>2</sub> O] | 1.5 L                                              |
| Max. Stirrer Bar Length                 | 40 mm                                              |
| Speed Range · Setting                   | 300–2000 rpm · scale, no digital display           |
| Electrode Holder                        | Holder with clamp for pH electrode or other sensor |
| Heating                                 | Not part of this model's specification             |

| Specifications                 |                                                                          |
|--------------------------------|--------------------------------------------------------------------------|
| Protection Class               | IP21                                                                     |
| Power Requirements             | 100–240 V, 50/60 Hz or DC 12 V · 7.2 W rated · 1.2 W motor output        |
| Dimensions [W×D×H] · Weight    | 150 × 144 × 54 mm · 0.3 kg                                               |
| Permissible Ambient Conditions | 5–40 °C, 80% RH                                                          |
| Alternative Plate Shape        | Round plate Ø120 mm · 150 × 145 × 50 mm — not supplied on this datasheet |

Five groups of values are combined into single rows for layout only — Working Plate, Drive, Speed Range/Setting, Power Requirements and Dimensions/Weight; no figure is lost. Rated power (7.2 W) and motor output power (1.2 W) are separate figures and are not interchangeable. Maximum stirring volume is stated for water; maximum bar length is a separate limit. There is no fixed viscosity or load derating — viscous media will not reach the 1.5 L water figure, so match the bar to the vessel and confirm by trial. Speed is set on a scale, and we do not specify a speed accuracy, a torque figure or a continuous-duty rating for this model; confirm any requirement that depends on them before ordering. The supply is a single 100–240 V band with a 12 V DC option, so confirm the power arrangement, connector and any supplied accessories at quotation. Heating is not part of this model's specification — ask us about the heated models in the ALab™ range if your method needs it.

#### Scope of delivery

|                                                                            |                                                               |
|----------------------------------------------------------------------------|---------------------------------------------------------------|
| — Instrument: EcoStir square plate magnetic stirrer, with holder and clamp | — Shown: pH electrode and vessel (illustrative)               |
| — Shown: decorative plate designs                                          | — Included accessories and quantities: confirmed at quotation |
| — Accessory part numbers: confirmed at quotation                           | — Supply: 100–240 V, 50/60 Hz or DC 12 V                      |

#### SECTION IV

### Applications

Typical applications for the ALab™ EcoStir Square Plate Magnetic Stirrer include:

- **Stirring 300–2000 rpm** — set on a scale; maximum stirring volume 1.5 L H<sub>2</sub>O, maximum bar length 40 mm
- **Electrochemistry and titration** — the holder and clamp take a pH electrode or other sensor in the stirred vessel
- **Water and environment monitoring, drug and food analysis** — routine sample preparation and mixing
- **Liquid culture mixing** — continuous mixing with no heat source on the plate
- **Mobile and field laboratories** — 12 V DC supply option, 0.3 kg instrument, 150 × 144 mm footprint

**Product value:** 1.5 L of water across 300 to 2000 rpm from a 120 × 115 mm PET plate, with a holder and clamp for a pH electrode or other sensor, and mains or 12 V DC operation from a 150 × 144 mm footprint and a 0.3 kg instrument. Confirm operating conditions and accessory requirements for the intended application.

Revision Date: 09/24/2026

**DISCLAIMER**

ALab™ is a trademark of ACS Material, LLC. ACS Material, LLC believes that the information in this Technical Data Sheet is accurate and represents the best and most current information available to us, but makes no representations or warranties, either express or implied, regarding the suitability of the equipment for any application. Specifications are current at the date of issue and may be improved without notice; confirm product details, accessory inclusion and application suitability with ACS Material at the time of quotation. Performance in use depends on vessel, load and method. IP21 covers solid objects of 12.5 mm and above and vertically dripping water; it is not a rating for splashing, hosing, immersion or use in a flammable atmosphere. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.