TECHNICAL DATA SHEET

ALab™ MS-H280-S4 / MS-H280-S6 Multi-Position LCD Digital Magnetic Hotplate Stirrer

4- and 6-channel magnetic hotplate stirrer · Ø134 mm plates · RT to 280°C · 200 to 1500 rpm · 3 L per channel



ALab™ MS-H280-S4 / MS-H280-S6 Multi-Position LCD Digital Magnetic Hotplate Stirrer

The ALab™ MS-H280-S4 (left) and MS-H280-S6 (right) Multi-Position Magnetic Hotplate Stirrers; image shown for reference.

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

Revision Date **10/23/2026**

SECTION I

Product Overview

The ALab™ MS-H280-S4 / MS-H280-S6 are 4- and 6-channel LCD digital magnetic hotplate stirrers with Ø134 mm ceramic-coated aluminum work plates. Each channel heats from RT to 280°C and stirs up to 3 L of water at 200 to 1500 rpm, with independent start/stop, temperature, speed and display.

They are designed for parallel experiments and multiple-parameter optimization such as Kjeldahl nitrogen determination, Soxhlet extraction and parallel synthesis. The "HOT" warning flashes when the work-plate temperature is above 50°C after the power switch is turned off. The two independent safety circuits monitor the instrument. When overheating is detected and the sensor malfunctions, heating stops and an alarm sounds. When a short circuit is detected, power is cut off.

SECTION II

Core Advantages

- **Channels** — 4 or 6, independent
- **Speed** — 200 to 1500 rpm
- **Motor** — brushless DC
- **Heating** — RT to 280°C, PID
- **Plates** — Ø134 mm, ceramic coated
- **Safety** — HOT warning, 2 circuits

SECTION III

Specifications

Technical data — MS-H280-S4 · MS-H280-S6

Specifications	
Brand	ALab™ by ACS Material
Models	MS-H280-S4, MS-H280-S6
ACS Cat. No.	Parent ALMSH46G; ALMS0D00, ALMSH600
Work plate dimension	Ø134 mm
Work plate material	Aluminum with ceramic coating
Motor type	Brushless DC motor
Max. stirring quantity per channel [H_2O]	3 L
Maximum stirrer bar length	40 mm
Speed range	200 to 1500 rpm
Speed control accuracy	±20 rpm
Speed display	LCD
Temperature display	LCD
Heating temperature range	RT to 280°C
Overheating protection	420°C
Temperature display resolution	0.1°C
Temperature control accuracy	±1°C (<100°C), ±1% (>100°C)
External temperature sensor	PT1000 (accuracy ±0.2°C)
Protection class	IP21
Voltage, frequency	100 to 120 V, 60 Hz; 200 to 240 V, 50 Hz
Permissible ambient temperature and humidity	5 to 40°C, 80% RH

Model comparison

Parameter	MS-H280-S4	MS-H280-S6
Stirring positions	4	6
Max. stirring quantity [H_2O]	3 L × 4	3 L × 6
Motor rating output	5 W × 4	5 W × 6
Heating power	600 W × 4	600 W × 6
Total power	605 W × 4	605 W × 6
Dimensions [W × D × H]	701 × 265 × 127 mm	564 × 523 × 127 mm
Weight	8.7 kg	12.7 kg
ACS Cat. No.	ALMS0D00	ALMSH600

Control and design

Function	Detail
Channel control	Independent start/stop, temperature, speed and display for each channel
Display	LCD per channel shows the runtime temperature and speed, or the settings; indicators show the status of each channel
Temperature control	PID control, RT to 280°C; external PT1000 temperature sensor (accuracy ±0.2°C)
Safety	The "HOT" warning flashes when the work-plate temperature is above 50°C after the power switch is turned off. The two independent safety circuits monitor the instrument. When overheating is detected and the sensor malfunctions, heating stops and an alarm sounds. When a short circuit is detected, power is cut off
Protection class	IP21

SECTION IV

Applications

The 4/6 channel hotplate magnetic stirrers are designed for parallel experiments and multiple-parameter optimization, for example Kjeldahl nitrogen determination, Soxhlet extraction and parallel synthesis, in test laboratories for food, animal feed, textile, soil, sewage, water treatment, pharmaceutical, polymerization, petroleum products, resin and plastic.

Specifications are per the tables above.

Revision Date: 10/23/2026

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. ACS Material makes no representations or warranties, either express or implied, regarding the suitability of the equipment for any application or the accuracy of the information contained within this document. Specifications are typical and may vary by model; assess product details and application suitability for the intended use. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.