

Synthesis Workstations

Better Chemical Synthesis

More Successful Experiments



Improved Usability

EasyMax allows chemists to run reactions without an ice bath, oil bath, heating mantle or cryostat. With an instantly familiar touch screen, chemists control reaction parameters at all times, including changing preprogrammed conditions when unattended.



Develop Better Chemistry

Chemists explore new reaction conditions and innovative chemistry by setting temperature to any point from -90°C to 180°C . Record all reaction conditions, making it easy to export data or repeat identical experiments.



Flexible Temperature & Volume

The EasyMax family covers a wide temperature, volume and pressure range. The smaller volume EasyMax 102 LT is designed for early development work, EasyMax 102 for reaction screening and optimization, while the larger volume EasyMax 402 is ideal for scale-up experiments and crystallization studies.



Increased Personal Safety

Personal safety is ensured by controlling all parameters via remote touchscreen without opening the hood. Active temperature control holds temperatures constant while dosing, allowing chemists to avoid formation of unstable by-products or significant temperature increase during exothermic reactions.



EasyMax™ Basic 102, 102 LT and 402

Demand for innovative chemistry has resulted in the adoption of robust, easy-to-use synthesis workstations to increase quality, reduce costs and increase speed of research and development. By replacing traditional round bottom flasks and jacketed lab reactors with EasyMax, scientists can synthesize more new compounds, eliminate non-viable candidates earlier and perform reaction optimization. Synthesis workstations deliver key information to help researcher's reduce failed experiment and complete more successful investigations.

METTLER TOLEDO

EasyMax™ 102, 102 LT and 402 Basic

Technical Specifications

	EasyMax 102 LT Basic	EasyMax 102 Basic	EasyMax 402 Basic
Temperature Range	–90 °C to 80 °C (jacket temperature)	–40 °C to 180 °C (jacket temperature)	
Temperature Modes	Jacket control, reaction mixture control, distillation, crystallization		
Thermostat Technology	Solid state (heating: electric, cooling: Peltier)		
Instrument Cooling	Tap water or ethylene glycol at 15 °C (3 L / min) for temperatures to approx. –50 °C; Cryostat with a capacity of 150 W at –20 °C for temperature to approx. –65 °C; Cryostat with a capacity of 390 W at –60 °C for temperature to approx. –80 °C	Tap water or ethylene glycol (3 L / min) for temperatures to approx. –10 °C; Cryostat with a capacity of 720 W at 20 °C for temperature to approx. –10 °C; Cryostat with a capacity of 450 W at –10 °C for temperature to approx. –40 °C	
Cooling Connector	M16 x 1	8 mm hose barb	
Reactors	8, 25, 50 and 100 mL one-piece reactors; 100 mL high workup volume two-piece reactor	8, 10, 25, 50 and 100 mL one-piece reactors; 50 mL, 100 mL and 100 mL high workup volume two-piece reactors; 50 mL and 100 mL pressure reactors	400 mL one-piece reactors; 100 mL and 400 mL two-piece reactors
Covers	Glass, 5 port (one-piece reactor); Glass, 6 port; PTFE, 6 port		Glass, 7 port (one-piece reactor); Glass, 6 port; PTFE, 6 port
Stirrer	Magnetic and overhead stirring		Overhead stirring
Stirring Speed	50 rpm to 1000 rpm		
Stirring Types	Pitch blade (glass, Alloy C-22); Anchor (glass, Alloy C-22); Rushton Turbine (Alloy C-22); Half-moon blade (PTFE)		
Backlight	2 LED (white) per reactor		
Dimensions, WxDxH	430 mm x 360 mm x 280 mm (17" x 14" x 11")	330 mm x 360 mm x 280 mm (13" x 14" x 11")	430 mm x 360 mm x 280 mm (17" x 14" x 11")
Weight	21 kg, including touchscreen	15 kg, including touchscreen	20 kg, including touchscreen
Power Supply	100 V to 240 V AC; 50/60 Hz		
Data Logging	All measured data, every two seconds		
Data Transfer and Evaluation	USB memory stick – Microsoft® Excel®; optional upgrade to use iControl™ and iC Data Center™ software		
Connectivity	CAN bus to connect to METTLER TOLEDO accessories; Ethernet connection		
Touchscreen	135 mm x 195 mm (5.3" x 7.7"), protected by a replaceable cover		
Supported Languages	English, German, French, Spanish, Japanese, Chinese		
pH Measurement	Through connection to METTLER TOLEDO SevenExcellence™ pH meter		

Upgrade Options

EasyMax Basic Plus Upgrade

This upgrade adds data export, task programming and a trend viewer to EasyMax Basic.

EasyMax Advanced Upgrade

This package upgrades EasyMax Basic Plus to an EasyMax Advanced giving access to all supported EasyMax functionalities like automated data capture, pH-control, the option for PC control and many more.

www.mt.com/EasyMaxBasic

For more information

METTLER TOLEDO Group

Automated Reactors and In-situ Analysis
Local contact: www.mt.com/contacts

Subject to technical changes

© 01/2021 METTLER TOLEDO. All rights reserved
Printed in Switzerland, 30248032C