# Reduce Chemical Development Times Complete More Successful Projects



#### **Reactor Flexibility**

The smaller volume EasyMax 102 is designed for reaction screening and optimization while the larger volume EasyMax 402 is ideal for scale-up experiments and crystallization studies.

#### **Unattended Control**

With an instantly familiar touch screen, scientists trend and control reaction parameters at all times, including changing preprogramed task sequences for 24 hour operation. Running unattended experiments increases productivity meaning more successful experiments per researcher.

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#### Automatic Data Analysis

During an experiment EasyMax automatically collects and stores a wealth of data. Every reaction event is captured enabling experiments to be easily compared and repeated. This enables researchers to make data driven decisions that improve process development.

#### **Seamless Integration**

Incorporating real-time, in situ instruments (ParticleTrack<sup>™</sup>, ReactIR<sup>™</sup>, Heat Flow Calorimetry) into synthesis workstations allows scientists to gain in-depth process understanding. By analyzing process analytical trends and controlling temperature, mixing, dosing and pH, process events are quickly identified and corrected.



## $\textbf{EasyMax}^{\!\scriptscriptstyle M}$ 102 and 402 Advanced

Demand for better R&D productivity has resulted in the adoption of robust, easy to use synthesis workstations to increase quality, reduce costs and increase speed of development. By replacing traditional round bottom flasks and jacketed lab reactors with EasyMax Advanced, scientists can quickly develop new synthetic routes, eliminate non-viable candidates earlier and improve reaction optimization. Synthesis workstations deliver key information to help researchers' complete more successful investigations.



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### Software Options

## **Technical Specifications**

iControl° –

location.

Determine Process Variables Provides scientists with a comprehensive understanding of the chemical reaction being studied.

iC Data Center<sup>\*</sup> – Capture, Prepare, Share Automatically capture experimental data, prepare it into useful formats and share it from a central

Heat Flow Calorimetry – Process Safety Screening Obtain thermodynamic information

under both isothermal and nonisothermal conditions.

·	EasyMax 102 Advanced	EasyMax 402 Advanced
Temperature Range	–40 °C to 180 °C (jacket temperature)	
Temperature Modes	Jacket control, reaction mixture control, distillation, crystallization	
Thermostat Technolog	Solid state (heating: electric, cooling: Peltier)	
Instrument Cooling	Tap water or ethylene gylcol (3 L / min) for temperatures to approximately $-10$ °C Cryostat with a capacity of 720 W at 20 °C for temperature to approximately $-10$ °C Cryostat with a capacity of 450 W at $-10$ °C for temperature to approximately $-40$ °C	
Reactors	10, 25, 50 and 100 mL one-piece reactors 50 mL and 100 mL 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, 4 and 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	330 mm x 360 mm x 280 mm (13" x 14" x 11")	420 mm x 360 mm x 280 mm (17" x 14" x 11")
Weight	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 – MicrosoftExcel <sup>*</sup> ; 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	Connection to METTLER TOLEDO SevenMul <b>p</b> iH meter	

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