



Thermo Scientific STEM Integrity 10 Reaction Blocks

Easy and Accurate Reaction Control

Thermo Scientific STEM Integrity 10

This highly sensitive, 10-channel detection system accurately controls temperature conditions within each individual cell. With 10 independent temperature control zones, ranging from -30 to + 150°C, temperature is maintained by either the block itself or by using a probe within the solution. Furthermore, with a temperature stability of $\pm 0.2^{\circ}\text{C}$ and a minimal setpoint overshoot of 0.5°C , extreme accuracy is guaranteed. Each cell has wide stirring control of 250 to 1200 rpm and a working volume of between 2 ml and 25 ml.



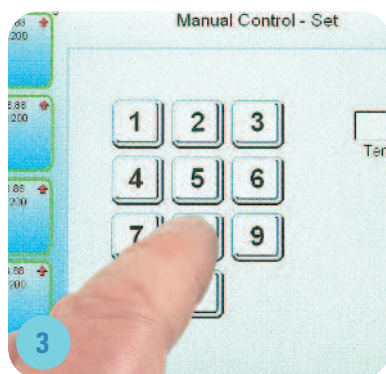
With the additional flexibility in using the STEM intrusive or non-intrusive IR turbidity probes, transitions can also be accurately measured, providing further functionality to the solubility process.



NEW!

Integrated microprocessor control with exclusive user-friendly and intuitive touchscreen

The integrated microprocessor control with exclusive touchscreen simplifies operation and enables rapid access of important information for each critical parameter in the reaction block. It provides trend analysis for convenient evaluation of your station's performance without connecting a laptop.



1. Start view of the monitor

Just select one of the buttons to the left of the screen and this will take you to the screen where you can make your choice of manual control or run/start to build a profile.

2. You have the choice

Either select to run the unit via a pre-set profile or select manual control.

3. Easy-to-use

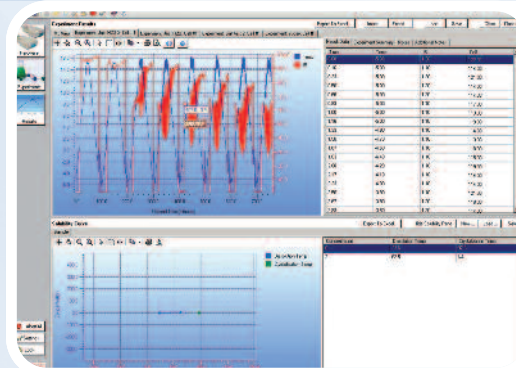
The touchscreen allows you to program in steps within your profile, e.g. set up the temperature.

4. Heads up

Warning screens alert you to ensure you are in control of the process and that the profile you have programmed can be performed as planned.

NEW! Total control and complete information at your fingertips!

- Front mounted 5.7" (145 mm) screen for easy accessibility and viewing
- Easy-to-use menu, prompts to guide you and simple icons reduce the potential for costly errors
- Visibility of each cell, showing the complete profile: on screen logs and usage recording
- Graph performance trends over established time frames and run event history logs protected with user pass codes and control lockouts
- Data extractable via USB or SD card



Integrity 10 solubility and crystallization software

This software provides full data logging of all key parameters, such as temperature and stirrer speed, using PC control. Experimental records and data are clearly displayed for convenient, at-a-glance monitoring of in-cell conditions. With real-time editing of ramp rates, run times and setpoints, the system is extremely user-friendly and all data is easily exported for further analysis. Additionally, data banks can be produced for simple storage and retrieval of frequently used protocols.

Thermo Scientific STEM Integrity 10 Reaction Block



TECHNICAL SPECIFICATIONS

THERMO SCIENTIFIC INTEGRITY 10

Number of position	10
Cell cavity diameter	25.5 mm
Glass vessel fill level	2 - 25 ml
Temperature range	-30 to + 150°C ¹⁾
Temperature difference between any two positions	180°C
Temperature overshoot	<0.5°C
Maximum controlled heating rate	5°C / min
Maximum controlled cooling rate	5°C / min
Stir speed range	250 - 1200 rpm
Viscosity capacity	Glycerine at 25°C
Recommended stir bar	AZS4235 10 Pack 12 x 4.5 mm (cylindrical)
	AZS4206 10 Pack 10 x 6 mm (oval)

Measurement

Measured temperature range	-40 to + 160°C.
Temperature resolution	0.01°C
Temperature accuracy	0.5°C

¹⁾ The minimum temperature is linearly dependent on the temperature of the cooling fluid. Specified range assumes cooling fluid temperature supply between 0°C - 5°C at a flow rate of greater than or equal to 2.5L/min and a cooling capacity of 1000W.
Note: Stir performance only guaranteed when using recommended stir bar.

Measurement

Measured stir speed range	250 to 1200 rpm
Stir speed resolution	1 rpm
Stir speed accuracy	10 rpm
Measured viscosity range	0-100 arbitrary units
Measured viscosity resolution	1 arbitrary units
Measured external temperature (optional thermometer) range	-40 to + 160°C
Measured external temperature (optional thermometer) resolution	0.01°C
Measured external temperature (optional thermometer) accuracy	1.5°C

Control

Stirrer speed range	250 to 1200 rpm
Stir speed resolution	± 10 rpm
Temperature range	-30 to + 150°C
Temperature resolution	0.01°C
Temperature ramp – rate	0.1 to 5 in 0.1 steps °C/min

ORDERING INFORMATION

Catalog No.	Description
PS20000 ¹⁾	Integrity 10, ten individually controlled cells
ATS20000	Integrity 10 reflux
ATS10377	Cap with valve and sensor inlet, package of 10
ATS10075	Glass tubers 24 x 150 mm, package of 10
AZS4206	Stirrer bar 10 x 6 mm oval, package of 10
AZS4235	Stirrer bar 12 x 4.5 mm cylindrical, package of 10
ATS10001	Multi temp 10 module

Catalog No.	Description
ATS10027	Thermocouple probe, package of 6
ATS11005	Integrity software
ATS10360-1	Non Intrusive IR sensor
ATS10230	Intrusive IR probe stainless steel
ATS10230H	IR probe hastelloy
ATS10232	Multi IR box

1) For 110 volt just add X1 to the catalog number. For 230 volt but with European plug add X6 to the catalog number.

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