



# Competitor Analysis

## TurboCycler 2 vs SensoQuest models

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# How to Compete with SensoQuest models?

## TurboCycler 2 provides better performance:

- › Higher ramp rate: 5.0 °C/sec (heat)/ 3.1 °C/sec (cool)
- › TurboCycler 2 eliminates the need for the gold/silver alloy and can still achieve high ramp rate and high accuracy and uniformity. It also helps to reduce the cost which can be beneficial to the customer
- › SensoQuest 's electronic moving parts in the heated lid could be degraded after intense running in high temperature environment

## TurboCycler 2 advanced features:

- 7" capacitive touchscreen
- USB port for protocol storage and transportation
- Remote monitoring

# Comparison Chart



Manufacturer	Blue-Ray Biotech	SensoQuest
Thermal Cycler	TurboCycler 2	LabCycler Gradient + Thermalblock 96
Sample capacity	96 x 0.2 ml tubes, 0.2 ml tube strips, or 1 x 96-well plate	electroformed gold plated silver, 96-wells, 0.2 ml single tubes, stripes & microtiterplates
Maximum ramp rate	5.0 °C/sec (heat)/ 3.1 °C/sec (cool)	4.2 °C/sec
Average ramp rate	4.0 °C/sec (heat)/ 2.4 °C/sec (cool)	3.6 °C/sec
Adjustable ramp rate	High (100%)/ Low (50%)	0.001 °C/sec to 5.0 °C/sec
Temperature range	4 to 99 °C	- 5.0 °C to 99.9 °C
Temperature accuracy	± 0.3 °C	N/A (± 0.01 °C control accuracy)
Temperature uniformity	± 0.3 °C	± 0.25 °C at 55 °C, ± 0.40 °C at 95 °C

# Comparison Chart



Manufacturer	Blue-Ray Biotech	SensoQuest
Thermal Cycler	TurboCycler 2	LabCycler Gradient + Thermalblock 96
Gradient	Over 12 rows	Over 12 rows
Gradient range	30 to 99°C	
Temperature differential range	1 to 24.9°C	40 °C
Gradient accuracy	± 0.3°C	
Row uniformity	± 0.3°C	

# Comparison Chart



Manufacturer	Blue-Ray Biotech	SensoQuest
Thermal Cycler	TurboCycler 2	LabCycler Gradient + Thermalblock 96
Heated lid	Constant pressure, air tight	Electrically moving, temperature and pressure programmable (Programmable from 30 to 120 Newton)
Lid temperature range	off, 105 °C, 120 °C	
Software tools	Tm Calculator, Copy Number Converter, Mastermix Preparation Wizard	
Display	7" VGA, 32K color with capacitive touchscreen	TFT illuminated colour display ¼ VGA, 5.7" diagonal, 320 x 240 Numeric silicone keys, Virtual keys on the resistant touch screen depending on the context
Remote monitoring	Optional via WiFi connection	
Port	1 USB Type-A	RS232 serial port

# Comparison Chart



Manufacturer	Blue-Ray Biotech	SensoQuest
Thermal Cycler	TurboCycler 2	LabCycler Gradient + Thermalblock 96
Memory	> 500 typical programs; unlimited with USB flash drive expansion	680 5-step-programs, or at least 3000 steps The last 16 program runs can be displayed anytime
Auto restart after power outage	Yes	Yes
Input power	100–240 VAC, 50–60 Hz; 750 W maximum	85 V to 265 V without switching, 50 to 60 Hz Maximum 350 W, standby 25 W
Dimensions (W x D x H)	25 x 41 x 23 cm	25.1 x 44.4 x 20.1 cm
Weight	9.5 kg	11.5 kg



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**Thank You**