### appliedbiosystems

SPECIFICATION SHEET

# Automated Thermal Cycler

# Designed for easy robotic integration

#### Key features of the Applied Biosystems<sup>™</sup> Automated Thermal Cycler (ATC)

- Ultrareliable instrument, in an ultrasmall footprint
- Compatible with SiLA Rapid Integration<sup>™</sup> standards\*
- · Compatible with full- and half-skirted plates



Block format0.2 mL block, compatible with full- or half- skirted plates**0.02 mL block, compatible with full-skirted platesPCR volume range10-100 µL for full-skirted plates; 20-100 µL for full-skirted plates5-20 µL for full-skirted platesHardware integration features• Predrilled mounting and/or alignment points at each corner of the chassis • 3-side and top plate access • Available in 3-connector configurations5-20 µL for full-skirted platesSoftware features• Application programming interfaces (APIs) available for integration with robotics systems • SiLA Rapid Integration software-standardized programming access* • Free software available for instrument demorprogramming access* • SiLA Rapid Integration software-standardized programming access*<	Instrument specifications	Automated Thermal Cycler 96-well	Automated Thermal Cycler 384-well	
PCR volume range       10-100 µL for full-skirted plates; 20-100 µL for S-20 µL for full-skirted plates         Hardware integration features       - Predrilled mounting and/or alignment points at each corner of the chassis	Block format	0.2 mL block, compatible with full- or half- skirted plates**	0.02 mL block, compatible with full-skirted plates	
Hardware integration features <ul> <li>Predrilled mounting and/or alignment points at each corner of the chassis             <ul></ul></li></ul>	PCR volume range	10–100 $\mu L$ for full-skirted plates; 20–100 $\mu L$ for half-skirted plates	5–20 µL for full-skirted plates	
<ul> <li>S-side and top plate access</li> <li>Available in 3-connector configurations</li> <li>Software features</li> <li>Application programming interfaces (APIs) available for integration with robotics systems</li> <li>SiLA Rapid Integration software-standardized programming access*</li> <li>Free software available for instrument demonstration and stand-alone operation</li> <li>Block module dimensions (H x W x D)</li> <li>As x 17.9 x 31.7 cm</li> <li>Control module dimensions (H x W x D)</li> <li>Acc5°C (35.0-99.9°C)</li> <li>Max sample ramp rate*</li> <li>As°C/sec</li> <li>As and Technology (NIST)</li> <li>Astandard sand Technology (NIST)</li> <li>Sandards and Technology (NIST)</li> <li>Service options</li> <li>A k go tatal (block module 6.0 kg, control module 3.4 kg)</li> <li>Power</li> <li>As (block module 6.0 kg, control module 3.4 kg)</li> <li>Power</li> <li>As (block module 6.0 kg, control module 3.4 kg)</li> <li>Pogram your own ramp rates, or use preprogram available</li> <li>Posta connectivity</li> <li>An</li> </ul>	Hardware integration features	Predrilled mounting and/or alignment points at each corner of the chassis		
Software features <ul> <li>Available in 3-connector configurations</li> <li>Application programming interfaces (APIs) available for integration with robotics systems         <ul> <li>SiLA Rapid Integration software-standardized programming access*</li> <li>Free software available for instrument demonstration and stand-alone operation</li> </ul> </li> <li>Block module dimensions (H × W × D)</li> <li>13.3 × 17.9 × 31.7 cm</li> <li>Control module dimensions (H × W × D)</li> <li>7.0 × 25.7 × 33.1 cm</li> <li>Temperature accuracy</li> <li>40.25°C (35.0–99.9°C)</li> <li>Max block ramp rate<sup>1</sup></li> <li>3.5° C/sec</li> <li>2.8°C/sec</li> <li>1.8°C/sec</li> <li>1.8°C/sec</li></ul>		3-side and top plate access		
Software features <ul> <li>Application programming interfaces (APIs) available for integration with robotics systems         <ul> <li>SiLA Rapid Integration software-standardized programming access*</li> <li>Free software available for instrument demonstration and stand-alone operation</li> </ul>        Block module dimensions (H × W x D)          <ul> <li>As x 17.9 x 31.7 cm</li> <li>Control module dimensions (H × W x D)</li> <li>As 25.7 x 33.1 cm</li> </ul>            Temperature accuracy              <ul> <li>Application program in the faces (APIs) available for instrument demonstration and stand-alone operation</li> </ul>            Max block ramp ratet          <ul> <li>Application program factor</li> <li>Applicat</li></ul></li></ul>		Available in 3-connector configurations		
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Image:		<ul> <li>SiLA Rapid Integration software-standardized programming access*</li> </ul>		
Block module dimensions (H x W x D)       13.3 x 17.9 x 31.7 cm         Control module dimensions (H x W x D)       7.0 x 25.7 x 33.1 cm         Temperature accuracy       ±0.25°C (35.0–99.9°C)         Max block ramp rate <sup>1</sup> 3.5°C/sec       2.8°C/sec         Max sample ramp rate <sup>1</sup> 1.8°C/sec       1.6°C/sec         Temperature ange       4–105°C (no condensation risk with sub-ambient temperatures)         Temperature uniformity       <0.50°C (20 sec after reaching 95°C)         Temperature calibration       Calibrated to standards traceable to the National Institute of Standards and Technology (NIST)         Service options       •2-year standard warranty includes rapid excharge service NIST-traceable temperature probe equipment available         Weight       9.4 kg total (block module 6.0 kg, control module 3.4 kg)         Power       100–240 V, 50–60 Hz, max 600 W         Flexible ramp rates       Program your own ramp rates, or use preprogrammed simulation modes         Data connectivity       LAN		Free software available for instrument demonstration and stand-alone operation		
Control module dimensions (H x W x D)7.0 x 25.7 x 33.1 cmTemperature accuracy4.0.25°C (35.0–99.9°C)Max block ramp rate¹3.5°C/secMax sample ramp rate¹3.6°C/secMax sample ramp rate¹1.8°C/sec1.8°C/sec1.6°C/secTemperature range4-105°C (no condensation risk with sub-ambient temperatures)Temperature uniformity50.50°C (20 sec after reaching 95°C)Temperature calibrationCalibrated to standards traceable to the National Institute of Standards and Technology (NIST)Service options-2-year standard warranty includes rapid excharge service > NIST-traceable temperature probe equipment availableWeight9.4 kg total (block module 6.0 kg, control module 3.4 kg)Power100–240 V, 50–60 Hz, max 600 WFlexible ramp ratesProgram your own ramp rates, or use preprogrammed simulation modesData connectivityLAN	Block module dimensions (H $x$ W $x$ D)	13.3 x 17.9 x 31.7 cm		
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Power     100–240 V, 50–60 Hz, max 600 W       Flexible ramp rates     Program your own ramp rates, or use preprogrammed simulation modes       Data connectivity     LAN	Weight	9.4 kg total (block module 6.0 kg, control module 3.4 kg)		
Flexible ramp rates     Program your own ramp rates, or use preprogrammed simulation modes       Data connectivity     LAN	Power	100–240 V, 50–60 Hz, max 600 W		
Data connectivity LAN	Flexible ramp rates	Program your own ramp rates, or use preprogrammed simulation modes		
	Data connectivity	LAN		

\* sila-standard.org

\*\* ATC half-skirted adaptor required for use with half-skirted 96-well plates. ATC ships with the full-skirted adaptor installed, which is required for use with full-skirted 96-well plates.

 $^{\dagger}$  Reaction volume at 1  $\mu L.$ 



## applied biosystems

#### Ordering information

Products	Cat. No.		Cat. No.
96-well system		384-well system	
ATC 96-Well System, laptop, 1 m cable	A31486	ATC 384-Well System, laptop, 1 m cable	A33977
• ATC 96-Well System, laptop, 3 m cable	A31487	• ATC 384-Well System, laptop, 3 m cable	A33978
• ATC 96-Well System, laptop, 10 cm cable	A31488	• ATC 384-Well System, laptop, 10 cm cable	A33979
• ATC 96-Well System, 1 m cable	A31489	• ATC 384-Well System, 1 m cable	A33980
• ATC 96-Well System, 3 m cable	A31490	• ATC 384-Well System, 3 m cable	A33981
Consumables:			
<ul> <li>Applied Biosystems<sup>™</sup> MicroAmp<sup>™</sup> EnduraPlate<sup>™</sup> Optical 96-Well Full-Skirted Plates with Barcode, Clear (500 plates/pack)</li> </ul>	A31732	<ul> <li>Applied Biosystems<sup>™</sup> MicroAmp<sup>™</sup> EnduraPlate<sup>™</sup> Optical 384-Well Clear Reaction Plates with Barcode (20 plates/pack)</li> </ul>	4483285
<ul> <li>MicroAmp EnduraPlate Optical 96-Well Full-Skirted Plates with Barcode, Clear (50 plates/pack)</li> </ul>	A31728	<ul> <li>MicroAmp EnduraPlate Optical 384-Well Clear Reaction Plates with Barcode (500 plates/pack)</li> </ul>	4483273

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