

# VeritiPro Thermal Cycler

The Applied Biosystems™ VeritiPro™ Thermal Cycler delivers high-end performance and proven reliability with advanced temperature control technology and connectivity.

- **Innovative design**—ramp rate of 6.0°C/sec, quiet fan, and ergonomic soft-close lid
- **Applied Biosystems™ VeriFlex™ Blocks**—provide precise control over 6 independent temperature zones for PCR optimization on the 96-well block option
- **Fleet control-compatible**—manage multiple instruments, users, and methods securely with Applied Biosystems™ Thermal Cycler Fleet Control Software



Block format	96-well, 0.2 mL alloy block	384-well, 0.02 mL alloy block
Max. block ramp rate	6.0°C/sec	5.0°C/sec
Max. sample ramp rate	4.4°C/sec	3.5°C/sec
Temperature accuracy	±0.25°C (35–99.9°C)	
Temperature range	0–100.0°C	
Temperature uniformity	<0.5°C (30 sec after reaching 95°C)	
Dimensions (H x W x D)	21.7 x 24.5 x 46.5 cm (8.5 x 9.6 x 18.3 in.)	
Weight	12.0 kg (26.5 lb)	
PCR volume range	10–100 µL	5–20 µL
Instrument memory	USB port and 16 GB onboard memory; onboard capacity >1,000 protocols	
Display interface	8 in. color thin-film transistor (TFT) LCD	
Power	100–240 V, 50–60 Hz, max. 700 W	
VeriFlex Blocks range	30°C range across block, 6 temperature zones (up to 10°C zone-to-zone)	Not applicable (isothermal block)
Cat. No.	A48141	A48140

Find out more at [thermofisher.com/veritipro](https://thermofisher.com/veritipro)

# VeritiPro Thermal Cycler—technical comparison to the Veriti Thermal Cycler

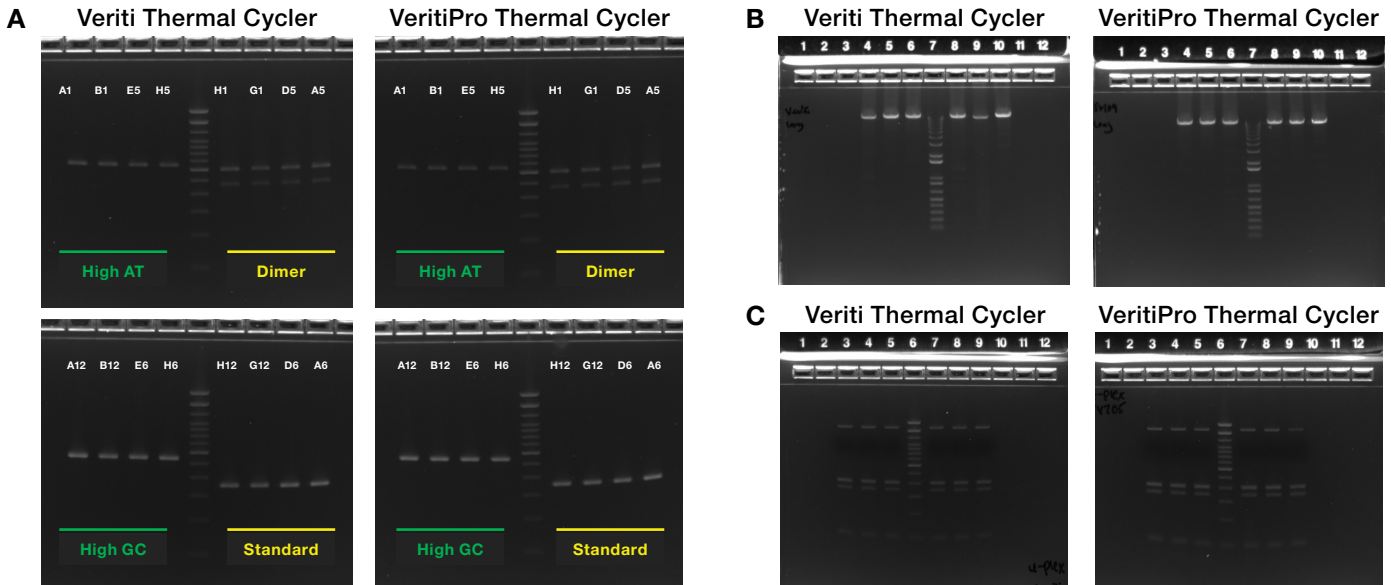


Figure 1. Features of the Applied Biosystems™ VeritiPro™ Thermal Cycler.

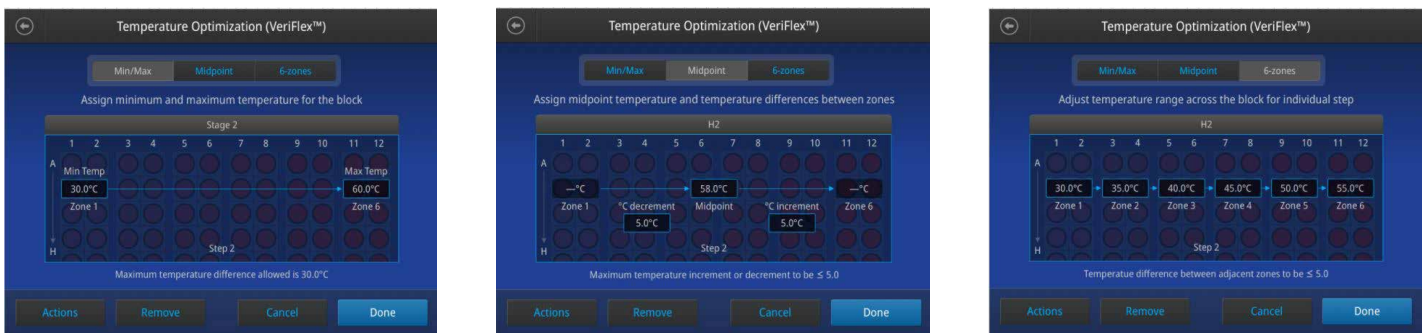
## Introduction

The Applied Biosystems™ Veriti™ Thermal Cycler set a new standard for innovation when it launched in 2007. It was the first thermal cycler to contain an LCD touchscreen interface, multiple temperature zone block, and web-enabled remote control software. In 2020, the Veriti Thermal Cycler was upgraded to the VeritiPro Thermal Cycler and now features the latest block technology and connectivity options. These advancements provide

higher ramp rates, quieter runs, and more intuitive Applied Biosystems™ VeriFlex™ temperature optimization setup while continuing to offer the same high-end performance (Figure 1). This study demonstrates that the VeritiPro Thermal Cycler delivers equivalent reliability, accuracy, and consistency in amplification uniformity as the Veriti Thermal Cycler by comparing coefficient of variation (CV) and robustness across a variety of PCR consumables.



**Figure 8. Comparison of robustness between Veriti and VeritiPro Thermal Cyclers.** (A) AmpliTaq Gold 360 Master Mix was used to amplify single, short human genomic DNA fragments (313 bp, 499 bp, 556 bp, or 585 bp) of different complexities in MicroAmp 8-Tube Strips with Attached Domed Caps. (B) The SequelPrep Long PCR Kit was used to amplify a single, long human genomic DNA amplicon (12,342 bp) in MicroAmp 8-Tube Strips with MicroAmp 8-Cap Strips. (C) Platinum SuperFi Green PCR Master Mix was used to simultaneously amplify four DNA amplicons (99 bp, 345 bp, 403 bp, and 1,606 bp) in MicroAmp Optical 8-Tube Strips with Attached Optical Caps.



**Figure 9. User interface of the VeritiPro 96-Well Thermal Cycler for temperature optimization.**

### Secure remote access

The VeritiPro Thermal Cycler is a cloud-enabled instrument, allowing users to connect anytime, anywhere with a mobile device or desktop computer to have access to the instrument while away from the lab. Access is secure and private with an account on the Thermo Fisher™ Connect Platform to design and share protocols, download experimental report files, schedule an instrument run, or check run status remotely.

### Multi-instrument control

The VeritiPro Thermal Cycler has multi-instrument run options, enabling one VeritiPro instrument on the same network to run the same protocol on many instruments simultaneously. For users seeking to control access of technicians to instruments and protocols,

Applied Biosystems™ Thermal Cycler Fleet Control Software (Cat. No. A40070) can be used with the VeritiPro Thermal Cycler to reduce errors and provide audit logs.

### Reliability

Each VeritiPro Thermal Cycler comes with the proven reliability and quality associated with Applied Biosystems™ instruments. To ensure the highest reliability, components used to manufacture thermal cyclers must pass rigorous testing for repeated stress, environmental conditions, including low and high temperature and humidity, as well as shock and vibration testing according to ISTA standards. This testing ensures each VeritiPro unit will deliver high-quality performance.

## Discussion

Consistent amplification uniformity and robust thermal performance during PCR are crucial to obtaining high-quality results. In this study, we have shown that the VeritiPro Thermal Cycler provides thermal capabilities equivalent to those of the Veriti Thermal Cycler in uniformity and robustness, with templates of differing lengths and complexities.

Results with the VeritiPro Thermal Cycler were consistent across multiple combinations of PCR plates, tubes, strip tubes, adhesive films, and cap strips. Both low (10  $\mu$ L) and high (100  $\mu$ L) reaction volumes were tested on the VeritiPro 96-Well Thermal Cycler, and low (5  $\mu$ L), medium (10  $\mu$ L), and high (20  $\mu$ L) reaction volumes were tested on the VeritiPro 384-Well Thermal Cycler using the same experimental protocols that have been optimized and verified on the Veriti Thermal Cycler, without the need to reoptimize. Additionally, the VeritiPro Thermal Cycler offers higher ramp rates, allowing for faster time-to-results.

## Ordering information

Product	Cat. No.
VeritiPro 96-Well Thermal Cycler	A48141
VeritiPro 96-Well Thermal Cycler + MicroAmp 8-Tube Strips Package	A47396
VeritiPro 96-Well Thermal Cycler + MicroAmp EnduraPlate 96-Well Plates Package	A47397
VeritiPro 96-Well Thermal Cycler + MicroAmp TriFlex 3 x 32-Well Plates Package	A47398
VeritiPro 96-Well Thermal Cycler + ABRC*	A48764
VeritiPro 96-Well Thermal Cycler + REX**	A48765
VeritiPro 96-Well Thermal Cycler + MicroAmp 8-Tube Strips Package + ABRC	A48766
VeritiPro 96-Well Thermal Cycler + MicroAmp 8-Tube Strips Package + REX	A48767
VeritiPro 96-Well Thermal Cycler + MicroAmp EnduraPlate 96-Well Plates Package + ABRC	A48768
VeritiPro 96-Well Thermal Cycler + MicroAmp EnduraPlate 96-Well Plates Package + REX	A48769
VeritiPro 96-Well Thermal Cycler + MicroAmp TriFlex 3 x 32-Well Plates Package + ABRC	A48770
VeritiPro 96-Well Thermal Cycler + MicroAmp TriFlex 3 x 32-Well Plates Package + REX	A48771
VeritiPro 384-Well Thermal Cycler	A48140
VeritiPro 384-Well Thermal Cycler + MicroAmp EnduraPlate 384-Well Plates Package	A47399
VeritiPro 384-Well Thermal Cycler + ABRC	A50325
VeritiPro 384-Well Thermal Cycler + REX	A50326
VeritiPro 384-Well Thermal Cycler + MicroAmp EnduraPlate 384-Well Plates Package + ABRC	A50327
VeritiPro 384-Well Thermal Cycler + MicroAmp EnduraPlate 384-Well Plates Package + REX	A50328

\* ABRC: AB Repair Center extended warranty.

\*\* REX: Rapid Exchange extended warranty.

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