

PRODUCT BULLETIN

ISSUE/DATE:	JULY 2026	BULLETIN NUMBER:	26-PB-IC-AVANT HP IMPROVED SYSTEM PERFORMANCE
TOPIC:	AVANT HP IMPROVED SYSTEM PERFORMANCE	PRODUCT LINE:	AVANT HP SERIES

OVERVIEW

Trojan Technologies is pleased to introduce the next-generation AVANT 185 nm High Performance (HP) lamp, designed to deliver enhanced performance and improved operational reliability.

Developed by our Lamp Engineering team in close collaboration with our manufacturing partner, this new design incorporates targeted enhancements to optimize 185 nm UV output for TOC applications.

The result is a meaningful advancement in AVANT systems performance.

The new lamp part number is 52885-HS60S and is identified by a RED base.

KEY TRANSITION DATES

Available to Quote: Immediate

Order Acceptance Date: August 3, 2026

Note: All AVANT HP systems ordered on or after August 3, 2026, will be supplied with the new enhanced lamp as standard.

Installed systems produced before April 2026 will continue to use the 52885-TS60S for AMPS.

KEY PERFORMANCE IMPROVEMENTS

- Up to 25% improvement in overall system performance
- Optimized 185 nm UV output to improve TOC reduction efficiency
- Improved performance consistency across a wide range of operating conditions and temperatures

Development testing demonstrated significantly higher relative UV output from the optimized lamp design compared to standard production lamps.

Further validation of the 52885-HS60S lamp design confirmed:

- Substantial increases in 185nm UV intensity versus reference lamps
- Sustained performance gains over extended operating periods

These improvements are enabled through a series of targeted design enhancements, including:

- Optimized gas fill composition
- Advanced 185 nm coating technology

Collectively, these advancements deliver higher UV output while maintaining stable and reliable operating performance.

VALIDATION & TESTING

The new AVANT lamp has undergone rigorous internal testing and verification, including:

- Standardized Near-Field (NF) UV output testing
- Comparative performance testing vs. current production lamps
- Validation under multiple operating conditions

The lamp has also been aged to 9,000 hours, demonstrating:

- Sustained performance over life
- Stable output characteristics
- Consistency with end-of-life expectations

Testing protocols were specifically designed to ensure repeatable, production-representative performance results.

In addition to lamp-level validation, performance testing was conducted to quantify the performance impact of the new lamp design within AVANT reactors. This testing confirmed:

- Measurable increases in system-level UV output compared to current production configurations
- Improved TOC reduction performance under representative operating conditions

Performance testing was completed using validated methods, including actinometry and application-specific performance verification, to ensure alignment with real-world TOC reduction requirements.

These results confirm that the lamp design enhancements translate directly into meaningful, repeatable system performance improvements for both new installations and retrofit applications.

In summary, the improved AVANT 185 nm HP lamp delivers a meaningful step forward in system performance, reliability, and long-term operating value. Backed by rigorous lamp and performance validation, this next-generation design helps customers improve TOC reduction performance, maintain consistent operation across varying conditions, and unlock added value.

SUPPORT

We are here to help. We have additional support materials available upon request to help you evaluate your options. Our experienced team of UV experts will collaborate with you to review both your current and future needs and identify the best solutions for your customers.

Please contact your Regional Sales Manager or reach out to our Industrial Applications Team at applications@aquafineuv.com to get started.