



New Consolidated Advantage Series™ Controller Conversion and Upgrade Kits

Steam sterilizers featuring the Consolidated Push Button (PB) and the Mark V (MC) control systems can now be upgraded to brand new, state-of-the-art, Advantage Series™ controllers without replacing your entire autoclave. These conversions are cost-effective ways to extend the life of your sterilizer and enhance sterilizer performance at the same time.

New Upgrade Choices

Old Controller	New Controller
Push Button (PB-Series)	ADV-PB™ (Advantage Series™)
Mark V (MC-Series)	ADV-PRO™ (Advantage Series™)

Features and Benefits

The Advantage PB™ and Advantage PRO™ sterilizer control systems feature widely-supported Allen Bradley® Programmable Logic Controllers and touch screens. These controllers use proven industry standard components to provide dependable performance, solid reliability and international parts availability.

- Advantage Series™ controllers are based on the time-tested Allen-Bradley® PLC platform configured specifically for Consolidated
- All have intuitive Rockwell touch screens and real-time operating system
- All are UL/CSA listed

Kit Contents

- New control system
- Input/output relays (if applicable)
- Temperature probe(s)
- Pressure transducer (if applicable)
- All necessary cables and plumbing fittings required to successfully convert an old control system to a new one.

The new control system is housed in a vertical side-mounted enclosure. Input/output relays are installed into a pre-existing location on the sterilizer. These relays have visual indicators to assist service personnel in diagnosing sterilizer anomalies.

Mark V to ADV-PRO™ Controller Conversions

The ADV-PRO™ is designed for fast-paced, high-volume facilities that require multiple cycles and password protection. The ADV-PRO™ controller includes an Allen Bradley® Micrologix PLC as well as a PanelView 6" (15.24 cm) color active matrix TFT touchscreen with resolution: 320 x 240 pixels, 18-bit color graphics. A thermal printer with take up spool displays cycle information, time, chamber temperature, and chamber pressure. An impact printer is available upon request. The ADV-PRO™ controller comes with up to 22 programmable sterilization cycles for

- Gravity
- Liquids
- Vacuum*
- Bowie-Dick (Daily Air Removal Test)*
- Vacuum Leak Test*
- Low Temperature (Isothermal)*
- Air-Over-Pressure*
- F₀ cycle*

** Only applicable if equipped on original sterilizer.*

The controller conversion kit includes a new control enclosure that mounts to the side of the sterilizer where the previous Mark V enclosure was located. The existing Opto22 I/O board can be reused so that wiring to inputs and outputs such as solenoid valves remains intact.



Model PT-SR-24A shown with ADV-PRO™ full replacement column for recessed installation.

Upgrade Your Controller!



ADV-PB™ controller conversion, side mounted, replaces existing PB controller originally located at top; a replacement blanking panel is provided.

PB to ADV-PB™ Controller Conversions

The ADV-PB™ controller is the Consolidated entry-level control system offering the same simplicity and reliability as the legacy PB controller. It utilizes industry-standard cycles: gravity and liquid (post-vacuum drying optional).

All cycles include an initial conditioning or purge phase for air-removal. The ADV-PB™ controller includes an Allen Bradley® Micrologix PLC as well as a PanelView 3" monochrome touch screen.

Additional operator input comes from Run and Abort push buttons located below the touch screen. An impact printer displays cycle information, time, and chamber temperature. Although cycle parameters can be easily changed through touch screen data entry, the controller automatically stores the last Gravity and Liquids cycles, making it easy to run repeat cycles without re-entering parameters.

The conversion kit includes a side-mounted controller that replaces the top-mounted chart recorder and digital timer currently used. Also included is a new temperature sensor as well as input/output wiring required to connect the existing devices (e.g. solenoid valves) to the new controller.




- A. Optional WaterEco™ system (available upon request)
- B. Allen-Bradley® touchscreen controller
- C. Manual power ON/OFF switch
- D. Manual abort cycle button
- E. Manual start button
- F. Impact printer

Cloud Enabled Autoclaves - Real-Time Monitoring and Data Collection

Consolidated autoclaves are now able to connect to the internet — allowing scientists, lab managers, and facilities personnel to monitor their autoclaves and download their sterilization data from any internet-ready device. This feature is available as an option on all Consolidated models* — simply connect the autoclave via Ethernet or Wi-Fi to enjoy the benefits (cloud-based data storage, real time monitoring, and cycle alerts & reminders).

** This cloud feature may also be retrofit on existing Consolidated autoclaves with Advantage-Series controls.*

Cloud Benefits

 <p>Cycle Alerts & Reminders</p>	<p>Focus on your research – not on the equipment – by getting notified via text or email when the cycle is completed or maintenance is required. No more waiting around for the autoclave to finish running or wondering when service is due.</p>
 <p>Data Storage</p>	<p>No need to save paper print-outs from the autoclave. Conveniently access cycle data from the cloud where it is automatically stored. Download the data to your local computer or import data directly into Electronic Lab Notebook.</p>
 <p>Real-Time Monitoring</p>	<p>Avoid having to walk down the hall to check the status of the autoclave. See when the autoclave is in use, from any device, to better schedule your experiment and better utilize the autoclave.</p>

