DS300®

Poll Place Tabulator

Like all ES&S ballot tabulation equipment, the purpose-built DS300 Poll Place Scanner and Tabulator maintains the highest levels of physical and digital security controls. This paper-based system maintains paper vote records and takes digital images of each processed ballot. The DS300 is also compatible with the new Voluntary Voting Systems Guidelines (VVSG) 2.0.

Physical and System Access Controls

- The DS300 uses pick-resistant keylocks and tamper-evident seals to secure sensitive components and protect against tampering within the unit. Each tabulator also uses a keylocked case for transport and shipping.
- Each administrative and election function, such as viewing the Admin menu and opening and closing the polls on Election Day, requires authentication with a designated security code.
- On the front of each unit is an inactive slot for a smart card. This feature will be implemented in a future release to support multifactor authentication.

System Application Controls

- Each DS300 is paired with an encrypted card containing the firmware inside the unit. This technology ensures the card cannot be taken out of the machine and altered, viewed or changed. If the DS300 unit detects a counterfeit card, it will not boot up.
- Only approved and certified USB flash drives are accepted by the tabulator to prevent unauthorized data transfers or uploads.

Encryption, Hash Validation and Digital Signatures

- The DS300 also uses Secure Boot and application allowlisting to verify only the certified operating system, software and firmware are on the unit. For more information about these security features, see *Secure Boot & Application Allowlisting Security Fact Sheet*.
- Election officials can validate directly on the unit that all resident firmware matches the firmware version certified for use in that jurisdiction. This validation also verifies that every file on the operating system is exactly as was written during the Trusted Build completed by the Voting Systems Test Laboratory (VSTL).
- All data generated during the polls is digitally signed and encrypted as a bundle at poll close.

Audit Logs

- Each DS300 generates a detailed audit log of all actions and events that occur on the unit. The audit log can be printed at any time and can be exported from the Electionware® Reporting module to track all election processes for accuracy and accountability.
- Every action and event — access attempts, access of system functions and errors — is logged and time-stamped.

Post-Election Auditing and Paper Ballot Cards

ES&S fully supports the use of paper ballots and post-election audits to ensure accuracy and increase confidence in our country's election process. ES&S views paper records as critical for auditing. A physical paper record of the selected candidate names provides the means to a statistically valid post-election audit.
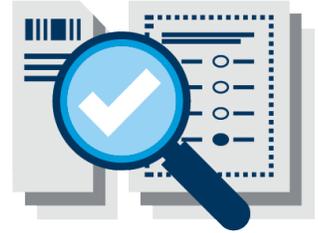
Is a Paper Ballot Card Auditable?

Yes. Just as hand-marked paper ballots can be inspected or audited by hand or by machine, so can ballot cards. A ballot card contains the same data as a hand-marked ballot, displayed in different ways. During a post-election hand-count audit, selected candidate names are used to count the vote.

ES&S Security Philosophy

Nothing is more important to ES&S than protecting America's democracy by supporting secure, accessible and accurate elections. That's why every ES&S product reflects our three-part security philosophy:

- **Design:** All products are designed, without compromise, to meet the latest and ever-evolving standards in security, accuracy and reliability.
- **Testing**: In addition to ES&S testing protocols, all tabulation systems are rigorously tested and certified by the federal Election Assistance Commission (EAC), which reflects security and performance standards developed by scientists, academics and election officials. ES&S also takes security testing to the next level, executing penetration testing with independent, accredited laboratories. ES&S submitted our end-to-end voting configuration for Cybersecurity and Infrastructure Security Agency (CISA) critical product evaluation (CPE) at one of our nation's leading research labs.
- **Implementation:** The entire ES&S team is devoted to ensuring that each piece of technology performs as expected on Election Day, helping election officials uphold the laws of their jurisdiction, which mandate strict physical security and tight chain of custody of all voting machines.

Perhaps most importantly, all of us at ES&S are dedicated to supplying America with equipment and software for secure, accurate and accessible elections. We hold ourselves and each other accountable for this mandate and are proud to serve a role in this noble purpose.