**SECURITY FACT SHEET** 

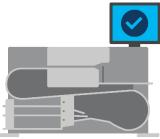
Central Count Tabulators



DS450<sup>®</sup> High-Throughput **Scanner and Tabulator** 



DS850<sup>®</sup> High-Speed Central **Scanner and Tabulator** 



DS950<sup>®</sup> High-Speed Central Scanner and Tabulator



#### **Physical and System Access Controls**

- The central count tabulators (DS450, DS850 and DS950) use keylocks and security seals to protect against tampering or intervention in system operations.
- All data ports and the power switch are secured behind clear plastic lockable and sealable doors to protect access and allow election officials to easily detect unauthorized access.



### **System Application Controls**

- These tabulators cannot write or otherwise change the election program once installed. The central count election media content is digitally signed and verifiable using the application.
- No options to change any ballot information exist on the central count tabulators. •
- All administrative functions are limited to the controls allowed through the touch-screen interface for machine operation only.



#### **Encryption, Hash Validation and Digital Signatures**

- Additionally, the DS950 utilizes 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.
- The units use digital encryption and signing of key configuration and data files for complete integrity of the election and results. All central count data is signed with FIPS-compliant digital signature algorithms. All generated data is also signed so that the program receiving the data can validate it.



#### **Audit Logs**

- The tabulators generate a digitally signed audit log that tracks all events that occurred on the unit — whether successful or failed — such as passcode attempts, user actions, system events and error messages.
- The tabulators provide options for printed and electronic real-time logs of all activity performed, allowing users to reprint logs on-demand or export electronic logs for review.
- Only the system can create, read, modify and delete the audit log content because the user interface is locked out of these functionalities.

# **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 by 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, ES&S' essence — its very being — is predicated on supplying America with equipment and software for secure, accurate and accessible elections. All of us at ES&S hold ourselves and each other accountable for this mandate and are proud to serve a role in this noble purpose.