# SECURITY FACT SHEET DS950<sup>®</sup> Central Count Tabulator

Designed to be compatible with the Voluntary Voting Systems Guidelines (VVSG) 2.0, the DS950<sup>®</sup> High-Speed Central Scanner and Tabulator accurately records all ballot selections as marked by the voter and captures a digital image of each processed ballot. This paperbased system features multiple layers of physical and digital security controls, boasting the latest tested and trusted technology.



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#### Physical and System Access Controls

- The DS950 uses keylocks and tamper-evident seals to secure sensitive components and protect against tampering within the unit. Similarly, the power switch and all USB ports are secured behind clear plastic lockable and sealable doors to allow access to only authorized election officials.
- Each tabulator requires designated security codes for specific administrative and election functions, such as loading an election and exporting results.



#### **System Application Controls**

- Once installed on the DS950, the election program cannot be overwritten or changed. The DS950 also does not permit any user to change ballot information on the unit.
- To prevent unauthorized data transfers or uploads, the DS950 accepts only approved and certified USB flash drives with trusted data that is digitally signed when created.
- All administrative functions are limited to the controls allowed through the touch-screen interface for machine operation only.



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

- As of EVS6302, EVS6400 and later, the DS950 uses Secure Boot and application allowlisting to verify only the certified operating system, software and firmware are on the unit. For more information, see *Secure Boot & Application Allowlisting Security Fact Sheet*.
- Each unit digitally encrypts and signs key configuration and data files for complete integrity of the election and results. All DS950 and generated data is signed with FIPS-compliant algorithms so that the program receiving the data can validate it.



#### **Audit Logs**

- The DS950 generates a detailed, time-stamped audit log entry for every event including passcode attempts, user actions, system events and error messages that occurred on the unit.
- To track all election processes for accuracy and accountability, the DS950 audit logs are digitally signed, can be viewed on and printed from the unit, and can be exported 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 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, 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.