Sentinel Hardware Keys vs. Aladdin HASP HL Competitive Matrix

Feature	Benefit / Aladdin Comparison
Public Key Encryption (ECC)	➢ Using public key encryption, the Sentinel Keys provide the highest level of anti-piracy protection. ➢ This is achieved through use of asymmetric key pairs which create a secure tunnel between the application and the token for secure key exchange. By never revealing the secret, the key is virtually hack-proof. ➢ The secure tunnel starts automatically with the license load. ➢ *This is a unique feature to SHK; we are not aware of a similar feature in Aladdin's HASP HL.*
Business Layer APIs	➢ Business Layer APIs, pre-configured, higher-level APIs for popular license models, reduce programming time required to secure a new application by up to 60% or more. This leads to improved implementation quality and security. ➢ *Hasp HL has a similar license concept and pre-defined licensing models.*
High Security Shell	➢ The Sentinel Shell provides quickly-added protection by adding multiple layers of security to prevent hacking attempts, such as: memory dumping, debugging and disassembling. ➢ *Aladdin's HASP HL only checks user-mode debuggers, while the SHK can track both user-mode and kernel mode components.*
Flexible License Models	➢ With Sentinel Business Layer APIs, licenses models can be created at the development stage and modified at fulfillment, allowing for flexibility in model design. ➢ *Hasp HL has a similar license concept and pre-defined licensing models.*
V-Clock	➢ The Sentinel V-Clock ensures secure time-based licensing to prevent time-tampering, without the added costs of a real-time clock. ➢ The time is stored in the key and can detect the last known date and time and calculates the system time every 32 seconds. The developer has the option to stop the application from running or run in restricted mode. ➢ *This is a unique feature to Sentinel Hardware Keys; we are not aware of a similar feature in Aladdin's HASP HL.*
Remote Update	➢ With Sentinel Keys, updates can be delivered through AES keys to the application. ➢ *For HASP HL, updates are AES encrypted and RSA signed. SafeNet was incorrect in our original assessment. (HASP updates <u>are</u> done with AES encryption.) However, RSA signature verification is handled in the software library, not the device*.
Distributor Keys	➢ Fulfillment can be securely pushed to distributors ➢ Distributor Keys can enforce limits such as a maximum number of licenses or the creation of trial versions only ➢ Encryption keys programmed at manufacture ensure that the token cannot be tampered with or cloned ➢ *This is a unique feature to Sentinel Hardware Keys; we are not aware of a similar feature in Aladdin's HASP HL.*