

# Elite EL STD

## Product Brochure



## Ultimate Protection

The ultimate in dongle protection, based on an excellent chip (EAL 5+), Elite EL STD is ideally suited to demands of the highest level of dongle security for protecting high end products from piracy. The Elite EL STD is designed and manufactured to explicit manufacturing norms (ISO/IEC 10373, ISO/IEC 15408), formulated in accordance with international criteria EAL (Evaluation Assurance Level), and ranked in the international 1-7 grading system for scientific evaluation of chip security.



## Best Chip Security

EAL 5+ is at the upper limit of current technical advancement in smart chip security. Elite EL STD is equipped with the most advanced 16-bit smart card chip making it a state of the art EAL 5+ implementation for the global hi-tech sector. EAL 5+ means that the Elite EL provides outstanding effectiveness in resistance of major attacks such as Electronic Attack (SPA and DPA), Probe Attack (SiShell), Chip Dissection and Debug Port..



## Code-Port Solution

Code Port is an evolutionary technique for transferring key codes from protected software to a dongle under secure communication. When a corresponding dongle is plugged, the protected application calls specific API functions to run key codes and data stored in the dongle and return legal results, so as to complete the full operation of the protected application. As the codes and data stored in the dongle do not have copies at the PC end, malicious crackers are unable to retrieve algorithms or data by physical interception.



## Handy Remote Update

Dongles can be updated remotely without the need for callback. The updating process is reliable and secure, therefore hugely improving work efficiency and saving greatly on management and logistics costs.



## Smart Technology

As distinguished from conventional chip technology, the Elite EL smart card chip contains a high performance cryptographic algorithm accelerator or coprocessor. A smart card chip of this nature can be viewed as a highly integrated mini PC. Now, let us see how smart it truly is:

- **Automatic self-locking mechanism**

Access to the chip is protected by PIN with the maximum number of re-tries pre-set by software developers. So under a dictionary attack, once the number of re-tries exceeds the pre-set value, the chip triggers a self-locking mechanism and blocks all external running operations.

- **Globally unique serial number**

A global unique SN that cannot be altered or rewritten is assigned to the smart card chip. This puts an end to piracy and enables effective management of the released chips.

- **Hardware random number generator (White Noise Technology)**

The smart card chip produces a high security random number, enabling the implementation of more secure solutions.

- **Built-in timer**

The timer is a very useful component for software protection that applies to time-limited usage and anti-tracking. The Elite EL has a built-in timer lasting more than 10 hours, considerably longer than similar competitor products.

- **Driverless**

In full compliance with USB-HID device interface specifications, Elite SL dongle can be used in most operating systems without additional device drivers. This greatly reduces the difficulty of deployment and maintenance.



## Technical Specification

CPU	32-bit, 16MHz	Smart Card
RAM(bytes)	VM Mode	254+2047
Memory(bytes)	64K	
IO Buffer(bytes)	250	
Working Voltage	DC 5V +/- 5%	
Max Consumption	1000mW	
Quiescent Current	15mA	
Max Current	25mA	
ESD Protection	4kV	
Working Temperature	-25°C~85°C	
Storage Temperature	-40°C~125°C	
Data Retention	10 Years	Typical
Rewritable	500,000 times	Lowest
Connection Type	USB 1.1 full speed, USB 2.0	
Encryption Algorithm	RSA, DES, TDES, SHA1	
Connection	Driver or HID	

### Operating Systems Supported

Window 98SE/ME, Windows 2000, Windows XP, Windows Vista, Windows 7/8/10, Windows Server 2003, Windows Server 2008, WinCE, Linux, MacOS.

### Programming Languages Supported

VC++, C++ Builder, BC, VC6, VS2005, VS2008, Delphi6, Delphi7, Delphi2010, VB6, VB2008, PB, AutoCAD, C#, Java and more. Contact us for extra support.

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