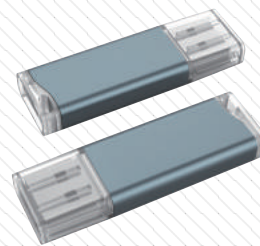


## Virbox Elite 5 Standard/Ult

Powerful Smart dongle for Software Copyright & Intellectual Property Protection and License Management Solution



### Product Description

The Virbox EL 5 is the latest version & future proofing of smart dongle designed for Software protection and licensing for software vendors, it can be either work independently like traditional dongle or works with the Virbox LM to provide top level security guarantee for software be protected.

Virbox EL5 integrated with top latest 32 bits ARM smart chipset and security level up to CC EAL5+ with execution speed up to 50MIPS, it contains secured RAM and flash memory which makes software dynamic be encrypted in different level via Virtual Machine Environment, Code Fragmentation Execution, Anti-Hacker Shield Technology, Virbox EL5 provides Anti-Hacker Engine, Anti-Reverse Engineering, Code Fragmentation technology to software vendor to protect SW and IP respectively.

### Highlights of Virbox Elite 5:

- Working together with Virbox Protector (Virtual Encryption Engine & Auto compiler), API, SDK and other tools provided by Virbox LM, It will dramatically reduce software vendor's effort in encryption & provides top security level to software Copyright & Intellectual Property Protection;
- It is the first Smart dongle designed with concept of "Software Defined Hardware". It is disruptive innovation in the software protection market;
- State of the Art Virbox COS and File Management system;
- Integrated with Virbox Middleware (Senseshield Service & Virbox User License Tool) to isolate the hardware (dongle) and the software and increasing the security;
- Super large storage size (256kb/512Kb) and support multi-type of license stored inside, support license of multi-application in one Elite 5;
- CA based Architecture with top level encryption algorithms.

### Security Functionality available as follows:

- Dedicated and Unique designed SDK for each software developer;
- Software protected by top security envelope tool: Virbox Protector, VM inside and multi encryption technology integrated, with easy to use and effortless feature;
- Pro Active Detection & Defense Technology to protect software in whole lifecycle: Anti-Hacker Engine(Support with Virbox License Service); Anti-Debug, Anti-Hook, Anti-Reverse Engineering, Anti-Emulation to prevent different hacker attack behavior;
- Secured Communication Tunnel between dongle, API & applications which prevent cracker to create fake license;
- Code Fragmentation Execution & Code Port to enhance software encryption level and also will save workload;
- Master Lock with PIN verification function available for each developer to ensure the authorized person protect the software and issue license only;

### RAM and Flash memory of Virbox EL 5

Virbox Elite 5 consist of 3 data storage area for Software developer:

- Public area (PUB): Free area for reading and writing data;
- Read-Only memory (ROM): ROM reserved for software developer to store data, such as digital signature, company logo, etc;
- Read-Write memory (RAW): RAW reserved for user to define & writing data;
- Every data storage size may be set up to 64 kb.

Elite 5 supports multi type of license mode & license renewal & update remotely.

### License Modes Support:

- |                             |                               |
|-----------------------------|-------------------------------|
| • Perpetual Licensing       | • Feature on Demand Licensing |
| • Trial-Based Licensing     | • Time-Based Licensing        |
| • Subscription Licensing    | • Usage Consumption Licensing |
| • Floating/Volume Licensing |                               |



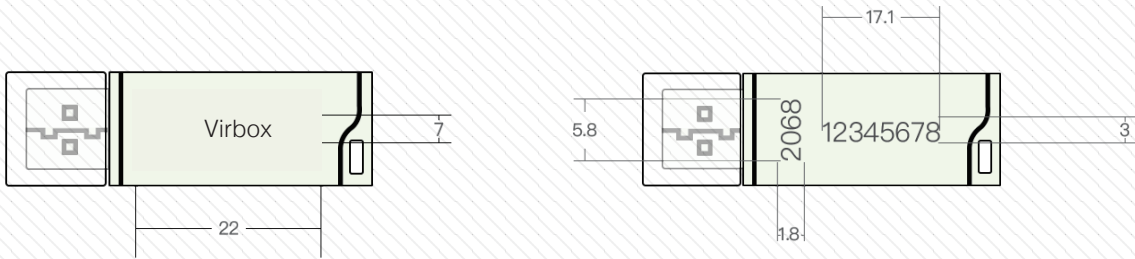
EL5 can be used standalone or can be used to connect to Virbox LM (Virbox Developer Center) to provide advanced protection and license functionality to software vendor.

EL5 is top level security tool to protect your software & IP and widely used and well proofed to protect software copyright & IP in different industry.

Technical Specifications

	Standard	Ult
Smart Chipset	ARM SC300, 32 bit Processor	ARM SC300
Execution Speeds	50MIPS/10DMIPS	50MIPS/10DMIPS
I/O	360Kb/s	360Kb/s
RAM	10Kb/s	12Kb/s
Programmable Memory	256Kb	512Kb/s
OS	Sense COS	Sense COS
No. of Licenses stored	3000	6000
Writing cycles	16.5M	16.5M
Data retention	10 Years (25 °C)	10 Years (25 °C)
Interface	USB 2.0 high speed	USB 2.0 high speed
Security Level	CC EAL5+	CC EAL5+
Encryption algorithms	RSA 1024/2048 ECC 192/256/384 AES 128/192/256 DES/TDES SHA 1/256	RSA 1024/2048 ECC 192/256/384 AES 128/192/256 DES/TDES SHA 1/256
OS Supported	Windows XP or above; Linux, Mac	Windows XP or above; Linux, Mac
Program Language	C/C++, Delphi, C#, Java, VB, VB.net	C/C++, Delphi, C#, Java, VB, VB.net
Case Material	Aeronautical Aluminum - Magnesium Alloy	Aeronautical Aluminum - Magnesium Alloy
Power Consumption	Max. 110 mw	Max. 110 mw
Working Voltage	4.5V~5.5V	4.5V~5.5V
Max Power Output	<20V	<20V
Working temperature	-25 °C~85 °C	-25 °C~85 °C
Store Temperature	40 °C~125 °C	40 °C~125 °C

Case Dimensioning(All dimensions in millimeter):



Unit:mm

Certificates

The Elite 5 Standard/Ult is tested and compliant with following Standards

CE, Test Report No.: SHEM160500274201, latest update: 2016-10-17;  
FCC, Application No.: VFHKEM16050027411T, latest update: 2016-10-17  
RoHS, Verification Report No.: TSNEC1600795701, latest update: 2019-02-13  
WEEE, Report No., TSNEC1600796101, latest update: 2016-06-16  
SVHC, Test Report No.: TSNEC1600795801, latest update: 2016-06-21



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