# Virbox EL 5 Genii

Small and powerful, it weighs only 3.6 grams, similiar size with a dollar coin. The hardware is as powerful as the EL5 Acme. A Tiny dongle for Software Copyright & Intellectual Property Protection and Licensing Management Solution.

## Product Description

The Virbox El 5 Genii is the latest version & future proof 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. EL5 Genii 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, EL5 Genii provides Anti-Hacker Engineeing, Anti-Debug Engineering, Code Fragmentation technology to software vendor to protect SW and IP respectively.

## Highlight of EL 5 Genii:

- Fully new Designed cobblestone appearance dongle with high-quality PC material, high strength case, customized hanging rope, easy to take and in case of dongle lose, it weighs only 3.6 grams, similiar size with a dollar coin.
- Working together with Virbox Protector (Virtual Encryption Engine & Auto compile), Virbox SDK, API, and other tools provided by Virbox LM, It will be dramatically reduce Software vendor effort and workload in Software Protection/Encryption & provide top security level protection to Software copyright & Intellectual Property.
- State of the Art COS and File Management system;
- Integrated with Virbox middleware and isolated physical hardware.
- Multi type of License stored inside, support licensing to multi-application in one EL 5 Genii
- Equipped with top level Security 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 Transplantation 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 protection the software and issue license only

RAM and Flash memory of EL 5 Genii consist of 3 storage zone:
- Public Area (PUB): Free area for reading and writing data;
- Read Only Memory (ROM): Read only area which reserved for Software developer, can store such as digital signature, License file, Company logo. etc.;
- Read and Write Memory (RAW): Reserved for developer to define & writing data;
Every area size can be set up to 64Kb.

EL 5 Genii supports multi license mode & license renewal/update.

## License Modes Support:

- Perpetual Licensing
- Trial-Based Licensing
- Subscription Licensing
- Network Floating Licensing
- Feature on Demand Licensing
- Time-Based Licensing
- Usage/Consumption Licensing

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

## Technical Specifications

|  | EL5 Genii | ULT |
|---|---|---|
| Smart Chipset | ARM SC300, 32 bits Processor | ARM SC300 |
| Execution Speeds | 50MIPS/10DMIPS | 50MIPS/10DMIPS |
| I/O | 360Kb/s | 360Kb/s |
| RAM | 10Kb/s | 10Kb/s |
| Flash Memory | 256Kb | 512Kb |
| OS | Sense COS | Sense COS |
| No. of Licenses stored | 3000 | 6000(optional) |
| Writing cycles | 16.5M | 16.5M |
| Data retention | 10 Years (25 °C) | 10 Years (25 °C) |
| Interface | USB 2.0 high speed rate | USB 2.0 high speed rate |
| Security Level | CC EAL5+ | CC EAL5+ |
| Encryption algorithms | RSA 1024/2048<br>ECC 192/256/384<br>AES 128/192/256<br>DES/TDES<br>SHA 1/256 | RSA 1024/2048<br>ECC 192/256/384<br>AES 128/192/256<br>DES/TDES<br>SHA 1/256 |
| OS Supported | Windows XP or above Linux, Mac | Windows XP or above Linux |
| Program Language | C/C++, Delphi，C#, Java，VB，.net, ..., etc. | C/C++、Delphi、C#、Java、VB、VB.net |
| Case Material | Hign quality PC | Hign quality PC |
| Power Consumption | Max. 100 mw | Max. 100 mw |
| Power Supply | 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 |
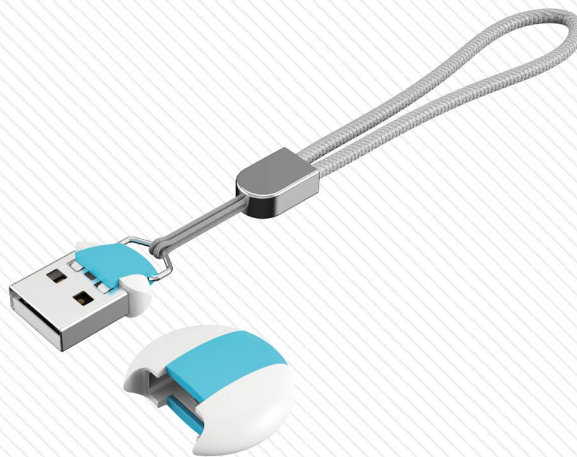


## Certificates

The EL 5 Genii is tested and compliant with following Standards
CE, Test Report No.: SHEM180700575801, Date of issued: 2018-08-03;
FCC, Test Report No.: SHEM180700575601, Date of issued: 2018-08-03
RoHS, Verification Report No: TSNEC1600795701, Date of issued: 2016-06-21
WEEE, Report No., TSNEC1600796101; Date of issued: 2016-06-16
SVHC, Test Report No.: No. TSNEC1801256802; Date of issued: 2018-Jul-12