

# KEYLOK Fortress RRTC®

Building a Secure Software Environment



Use our driverless Fortress Rechargeable Real Time Clock (RRTC) dongle to defend against circumvention of time-based licensing. An onboard, **rechargeable** real-time-clock operates independently of the system clock.

## Overview

- ✓ Rechargeable battery can be repeatedly charged and discharged for up to 500 charge cycles
- ✓ Useful for dongles used in embedded systems when components are not readily accessible
- ✓ Excellent solution for isolated or remote systems that are difficult to access
- ✓ Extended memory provides additional security and licensing options
- ✓ CodeVault offers enhanced security through execution of application code on the dongle
- ✓ Smart card processor and tamper-proof casing
- ✓ Extensive API library enables rapid & simple implementation

## Features

- ✓ Dongle battery charges while device is plugged into USB port
- ✓ Windows, Mac, Linux (including ARM)
- ✓ Protect multiple applications with one device
- ✓ Available for Networks (Windows) to enforce concurrent usage
- ✓ Implement creative licensing models including Expiration Date, Features and Counters
- ✓ Remote Update dongles in the field
- ✓ 5,000 - 55,000 bytes read/write programmable memory
- ✓ CodeVault for enhanced security
- ✓ Smart card processor
- ✓ Physically tamper-proof and durable

## OS and Development Tools

Operating Systems	Development Tools
Windows XP (32/64 bit) and newer	Borland C/C++
Linux 2.4 and newer (incl. ARM)	Delphi
MAC OSX	Intel Fortran
UNIX	Java
Ubuntu 13.1 x64 x86 / 12.04 x32 x64	Linux (C, Java)
Fedora V18 x64 x86	Microsoft Access
OpenSUSE 13.1 x32 x64	Microsoft Visual Basic
CentOS 6.5 x32 x64	Microsoft Visual Studio (C/C++/C#)
	PERL
	VB.Net



## Technical Specifications

Environment	
Storage Temperature	-10° F to 175°F (-23° C to 80° C)
Operating Temperature	-4° F to 140° F (-20° C to 60° C)
Battery	18mAh/3V, rechargeable AL-LI, about 500 charge cycles 3 years between charges
Dimensions / Connectors	
Fortress RRTC USB	50.5 x 16.8 x 8.2mm Standard USB port
Memory	
Type	Programmable memory
Data retention	At least 10 years
Programming RAM	5,120 bytes = 2560 memory locations 18,944 bytes = 9472 memory locations 50,560 bytes = 25280 memory locations 1 Million Write cycles per location Unlimited Read cycles
Security	
Encryption	Proprietary Encryption Algorithms
Authentication Password	2 <sup>96</sup> possibilities
Read Password	2 <sup>96</sup> possibilities
Write Password	2 <sup>96</sup> possibilities
Smartcard	ISO/IEC 15408 Security Evaluation Level EAL 5+ Highest level globally
Power	3.3V, LDO power-supply management