



noblemetric  
technology

# SecureToken

Resilient Cryptographic Device.

Excellencing Public Key Infrastructure (PKI) Security



# About SecureToken

SecureToken is an advanced secure microprocessor smart chip based USB token that works as a miniature cryptography computer designed for strong 2-Factor Authentication (2FA).

Cryptography keys can now be generated onboard and safeguard inside the secure element of SecureToken to support qualified PKI certificate implementation.

It enables secure 2FA which combines "What you have (SecureToken) and "What you know (User PIN)" during the authentication process.

Users are required to plug in the SecureToken and key in their respective User PINs in order to gain access into sensitive data/ information/ system and/or authorize any crucial transaction.

## WHAT is 2-Factor Authentication?

you need to  
**HAVE**  
something

you need to  
**KNOW**  
something

to access  
**WHAT**  
you want

## WHY use 2-Factor Authentication?

Added Layer of  
Protection

Future of Information  
Security

Compliant with  
Industry Standards



Identity Theft  
Security Breaches



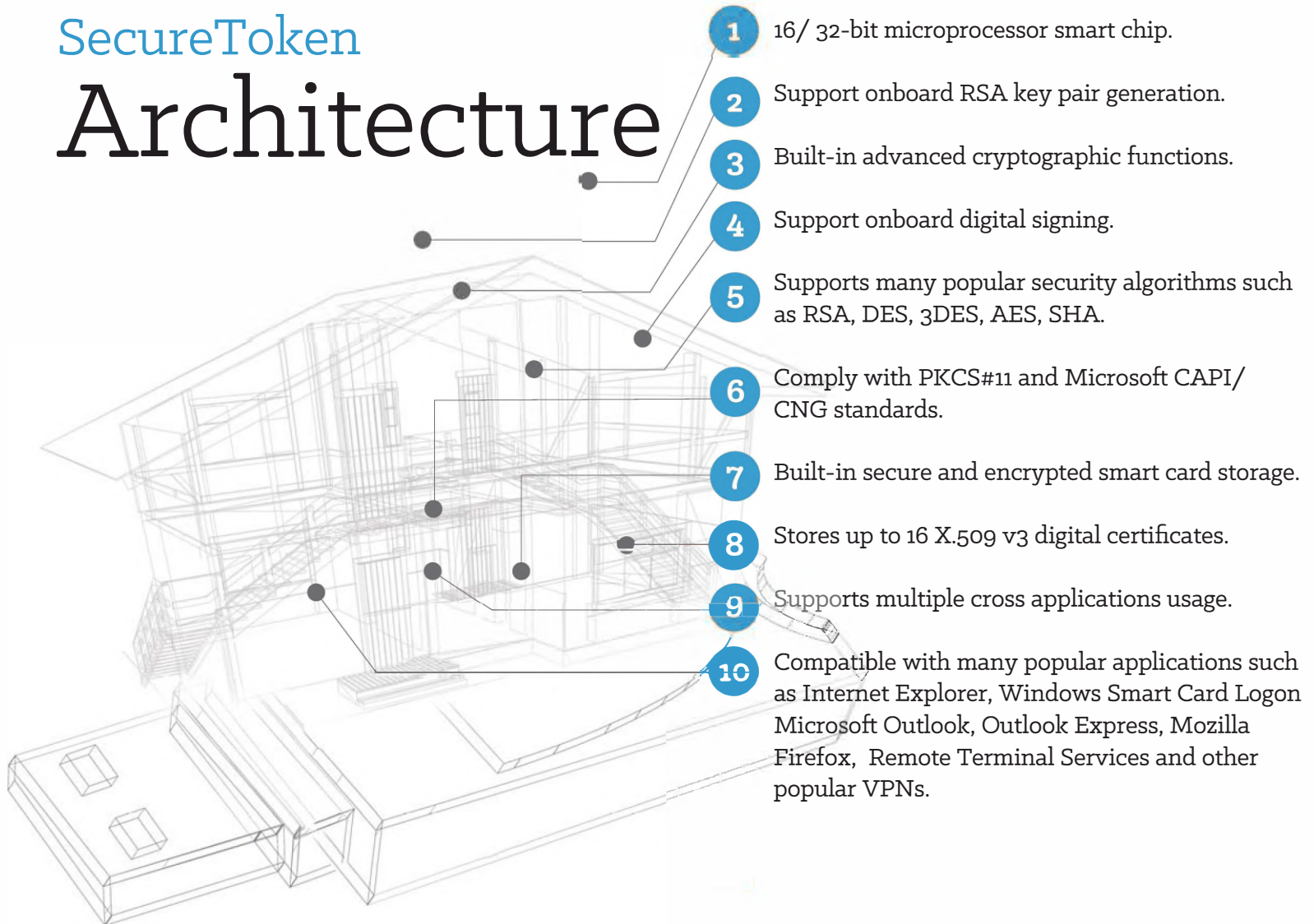
Government  
Healthcare Financial



Security  
Approved Safe

SecureToken

# Architecture



# COMMON 2FA

# APPLICATIONS

## Web or Network based Application Security

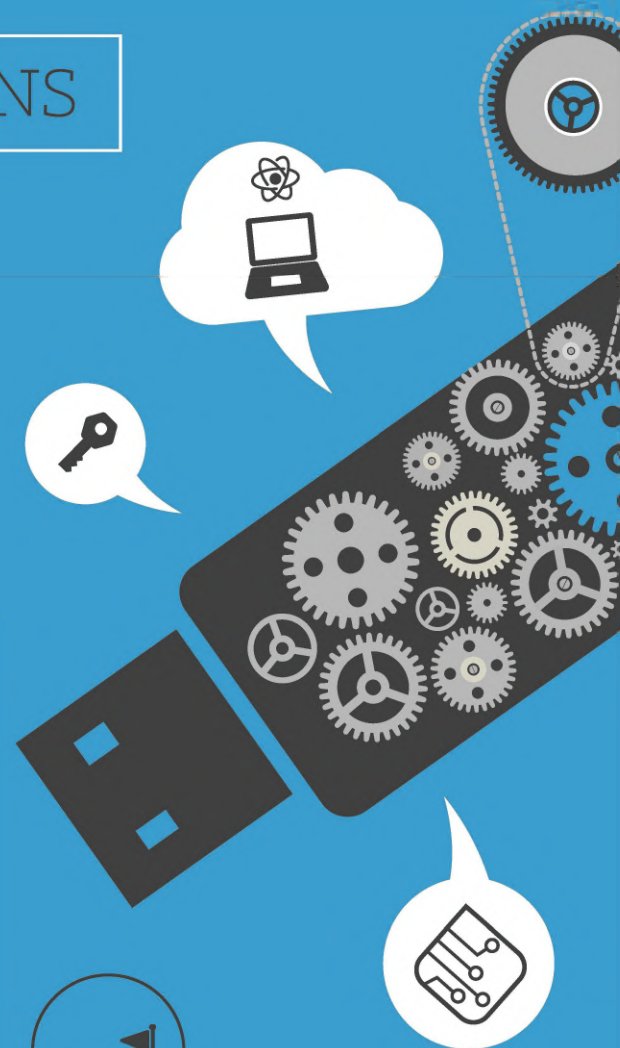
SSL Secure Web Sign On, Single Sign On, Secure Application Sign On, Secure VPN Sign On, eGov or eBanking Transaction Authorization, etc.

## PKI Implementation

Digital Signing, PKI Authentication, Encryption/Decryption, etc.

## Enterprise IT Security

Data/File/Drive Encryption, Email Signing and Encryption, Workstation or Network Access Security, etc.



## STRENGTHS AGAINST COMPETITORS



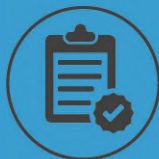
Highly Competitive Pricing



Dedicated Local Support



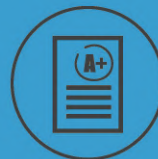
Product Localization



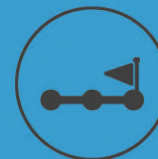
Proven Track Records



Security Certified Products



Qualified PKI/ Cryptography Experts



Complete PKI Turnkey Solution





Secure

Cost  
Effective

Portable



Versatile

ABC

Simple

## SECURITY FE★TURE HIGHLIGHTS

1

### Onboard Hardware Cryptography

RSA key pairs can be generated and stored onboard with digital signing on hardware to support issuance of Qualified Certificates. Supports various powerful security algorithms onboard to ensure cryptography activities are performed in and within the protected secure elements.

2

### True Random Generator

Hardware based true random number generator for strong challenge response authentication.

3

### Smart Card Security

SecureToken are built based on rigidly selected secure smart card platform to achieve highest level of hardware security architecture.

4

### Security Certifications

it comes with Common Criteria EAL2 Certified and FIPS 140-2 Level 3 Certified models. The products have gone through very rigid security validation by independent lab to officially prove the security strengths are at international levels.

5

### Secured and Encrypted Storage

Smart card memory provides highly secure and encrypted storage to keep all the security credentials out-of-reach by unauthorized personnel.

## PRODUCT

### Noble Token

Simplify PKI token deployment as to achieve excellent user experiences.



NobleToken is aimed to be bundled with NobleMetric patterned advanced SecureTMS client components that in order to simplify PKI token deployment as to achieve excellent user experiences.

The key challenge for most PKI implementation is user experience management, this usually considered as one of the key success factor. If the user needs to go through all the tedious PKI processes without proper, the chances to encounter strong user resistant will be very likely. A great PKI implementation should come with well designed user friendly approach to simplify PKI processes as much as possible while still complying to the set security policies.

### Software Development Kit

One unit NobleToken DEMO Token

One unit software/utilities CD-ROM

Contents inside the CD-ROM:

- Installation Guide - Developer Guide - Comprehensive User Manual - API Samples for Java and Active X - API Samples for PKCS#11 Interface, Microsoft CryptoAPI - Middleware Installation - DLLs and Header Files - Runtime Installation Package - Token Manager for Admin and User - Token Initialization Tool - User Guide for Online DEMO Token Management System Software Development

## Noble Token

NobleToken the latest innovation by Noblemetric Technology is designed to integrate all critical token management functionalities and certificate lifecycle to the middleware level without interaction with web browsers. In addition to that, almost every PKI processes can now be automated without heavily involving end users.

Implementation of NobleToken will only require backend integration to existing Registration Authority (RA) software with internet/ intra net connectivity between end users and the RA software.

### Typical PKI problems can now be solved with NobleToken:



#### Supporting

- **Difficulty on supporting multiple platform** The NobleToken online installer can now cross-platform supporting Windows, Linux & Mac without breaking a sweat.



#### Unblocking

- **Forgetting Token User PIN after long holiday which resulted a tedious unblocking process or even sending the physical token back to the provider**  
Secure Token User PIN Unblocking mechanism from NobleToken not only simplifies the PIN Unblocking process, but also allowing end users to perform such function remotely.



#### Enrollment

- **Tedious Certificate Enrollment Process via Online Enrollment Portal**

Certificate Enrollment via NobleToken eliminates the need of data entry from end user side with the end user only needs to verify necessary information before certificate enrollment take place.



#### Renewal

- **Tedious Certificate Renewal Process via Online Renewal Portal**

Auto Renewal is supported by NobleToken with even the possibility of using pre-configured renewal policy. Fully automated renewal is also possible.



#### Troubleshooting

- **Technical Troubleshooting especially for non-IT background users**

Diagnostic tool in the NobleToken is ready to provide revolutionary way of troubleshooting where most common problems can be resolved by the tool without even dialing the technical support number. In the event where further technical support is needed, this tool can produce a report which can be very useful for technical support to analyze the problem



#### Operate

- **Annoying ActiveX/ Java Applet Components**

Forget these web application components. The NobleToken can operate with full token and certificate functions without using any of these annoying components that requires client side installation and difficult to support.

# TECHNICAL SPECIFICATION

Model	NobleToken		
Chip Security Level	Secure Microprocessor Smart Chip based with PBOC, CFCA, certified CCEALS+		
Processor	16-bit		
Interface	CCID		
Card Operating System	128k (64K for User) on Smart Chip 2MB for Flash		
Memory Size	SecureCOS		
Middleware	Microsoft, MiniDriver, middleware for Windows CSP Direct-called library for PKCS#11		
Windows Smart Card Logon	YES		
Certificate Storage	Up to 16 (X.509 v3 Digital Certificate)		
On-Board Security Algorithms	RSA, DES, 3DES, SHA-1, Hardware generated 2048-Bit RSA Key Pairs. Optional to support 3rd party algorithmsSHA 256, SHA 384, ECDSA 192/256 , AES		
Dimension	59mm x 18mm x 9mm		
Certification	CE, FCC, MYCC Level 2 & FIPS Level 3		
Weight	5g		
Power Dissipation	< 250 mW		
Operating Temperature	0 °C ~ 70 °C (32 °F ~ 158 °F)		
Storage Temperature	-20 °C ~ 85 °C (-4 °F ~ 185 °F)		
Humidity Rating	0 to 100% without condensation		
Connector Type	USB 2.0 full speed, Connector type A		
Casing	Hard Molded Plastic, Tamper Prove (Optional), RoHS compliance		
Memory Cell Rewrites	At least 500,000 write/ erase cycles		
Memory Data Retention	At least 10 years		
Standards	X.509 v3 Certificate Storage, SSL v3, IPSec, ISO 7816 1-4 8 9 12, CCID		
Supported Operating Systems	Windows, LINUX and Mac		





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support@noblemetric.com  
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