# ePassAuto PKI USB Token

An easy-to-use "Plug&Play" PKI product

## **OVERVIEW**

FEITIAN ePassAuto PKI USB Token is a complete "Plug & Play" solution. The device can hold all necessary software programs, such as middleware, on an onboard read-only virtual CD-ROM area. Upon inserting the token to the host computer the software can be installed automatically. No extra storage, media or internet connection is required. This effectively reduces dependency on a host computer working environment, prevents fraud attacks and is highly convenient for end users. Besides the onboard flash memory function, the ePassAuto PKI USB Token contains a highly secure and high-performance smart card chip, which supports onboard RSA2048, AES, SHA-1, SHA-2 algorithms, and boasts the capability to store and protect digital certificates. ePassAuto PKI USB Token is an intelligent way to improve accountability and system security of any network.

#### Wide Range of Platform Support

ePassAuto PKI USB Token can work with Windows, Linux and Mac operating systems. Under Windows, the middleware can automatically be installed through easy-to-use Windows Update based procedure. Both CAPI and PKCS#11 interfaces are provide to work with all PKI applications. As the CD-ROM content is customizable the developer can add their own programs and roles to the token so as to maintain complete control over device functionality. In Linux system, the token can be fully controlled through a PKCS#11 library, no installation is needed. Linux users can use the solution by simply loading the programming library. Under MAC system, the token functions smoothly as a CCID device.

#### **Powerful Self-Contained Features**

The ePassAuto PKI USB Token onboard Flash memory provides different capacities to meet a variety of client site software requirements. The content stored onboard is read-only and well protected against computer viruses, Trojan programs, etc. A secure remote mechanism is provided to update the CD-ROM content. Software vendors can use a specially designed tool to generate a new CD-ROM image update file which is protected by a secure cryptographic algorithm. After the end user accepts the update file, they can use a client site update tool to improve the token content with just one click. The remote CDROM update mechanism makes the ePassAuto PKI USB Token based project extremely easy to maintain.



## **Task Specific Specialization**

ePassAuto PKI USB Token is ideal for large scale or specialized deployments. The automatic middleware functioning makes it easy for end users of Windows Linux or Mac operating systems. The customizable CD-ROM virtual drive allows developers to add their own programming to the onboard software. With the remote update feature the device can be kept current on the latest and most secure product offerings. Highly secure onboard algorithms afford the strongest possible degree of protection to your business critical data and communications.

# BENEFITS

## • A pure "Plug & Play" device that delivers strong security and practical usability

ePassAuto PKI USB Token features "Plug & Play" access with onboard middleware compatible with Windows and Linux operating systems and a full speed USB port requiring no additional hardware or software investment. Smaller than your thumb and weighing less than a coin ePassAuto PKI USB Token is a secure solution to be used anywhere and everywhere you need protection.

### • An flexible solution for projects of various scope and orientation

This solution is ideal a wide range of deployments of various size and scope covering practical applications in fields such as finance, government and enterprise. ePassAuto PKI USB Token is a powerful security measure that organizations can adopt to secure endpoints locally or for customers, partners, and employees requiring remote access. Fully automated, this security solution marries the need for strong protection with the need for convenience and flexibility and affordability.

## • Designed to satisfy industry best standards and specifications

ePassAuto PKI USB Token features highly secure onboard cryptographic algorithm RSA 2048. Strong two-factor authentication increases the security by ensuring that even if the device is lost or stolen the user must produce the unique PIN number associated with the device to be able to access the transaction validating and data encryption features stored within.

#### • Get the security you require on your own terms with available device customization

ePassAuto PKI USB Token can be programmed with a unique OEMed software interfaces for large projects or special circumstances. If the customer needs to further differentiate the custom logo printing and distinctive colour schemes are available upon request. The onboard middleware can be customized to different deployments.

#### • An all-inclusive solution effective in cost, deployment and maintenance

Neither a separate smart card reader nor a software CD is needed to be carried. Users can simply use the ePassAuto PKI USB Token anywhere as a purely plug & play solution. Cross platform operating features make the device suitable for different working environment. As ePassAuto PKI USB Token is "Plug&Play" the maintenance costs are minimized in the



product deployment. The strong protection of the onboard software and secure remote update mechanism can also effectively reduce the further maintenance cost.

# **FEATURES**

- Onboard mass Flash memory supports middleware automatic installation
  - Onboard 1MB, 2MB up to 8MB flash memory to store middleware
  - Device registers a virtual CD-ROM to host computer, supporting Auto-run and auto-installation
  - Plug & Play and non-driver device under Windows, Linux and MAC
  - Flash memory can be securely remote updated
- Built-in 32bit high-performance secure smart card chip
  - Onboard RSA, DES/3DES, SHA-1, SHA-256 algorithms approved by NIST FIPS CAVP
  - RSA key pair generation spends less than a minute
  - Hardware random number generator
  - 64KB EEPROM memory to store private keys, multiple certificates and sensitive data
- FEITIAN Card Operating System with proprietary IP
  - Secure messaging ensures confidentiality between the token and the application
  - Support X.509 v3 standard certificate. Support storing multiple certificate on one device
  - Onboard RSA2048 key pair generation, signature and encryption
  - 64 bit universal unique hardware serial number
- Temper evident hardware USB Token
  - USB full speed device
  - Compliant with ISO 7816 1-4 8 9 (CCID device under MAC OS)
  - Water resistant with glue injection (under evaluation)
  - Flexible hardware customization options such as logo, colour and casing
- Reliable middleware supports multiple operating systems
  - Supports Windows, Linux and Mac OS
  - Support PKCS #11 standard API and Microsoft CryptoAPI
  - Work with PKCS#11 & CSP compliant software like Netscape, Mozilla, Internet Explorer and Outlook
- Easy integration with various PKI application
  - Ideal device to carry digital certificates and works with all certificate related applications
  - Highly security ensured device for computer and network sign-on
  - Easy-to-use web authentication, Plug & Play under Windows, Linux and MAC
  - Support document, email and transaction signature and encryption

# SPECIFICATION

**Product Specification** 



Supported Operating System	32bit and 64bit Windows XP SP3, Server2003, Vista, Server2008, Seven
	MAC OS X
Middleware	Windows middleware for Windows CSP
	Direct-called library for PKCS#11 under Windows, Linux and MAC (No need to install middleware)
Standards	X.509 v3 Certificate Storage, SSL v3, IPSec, ISO 7816 compliant
Cryptographic	RSA 1024/RSA 2048 bit
Algorithms	DES/3DES
	AES 128
	SHA-1 / SHA-256
Cryptographic	Onboard key pair generation
Functions	Onboard digital signature and verification
	Onboard data encryption and decryption
Cryptographic APIs	PKCS#11
	Microsoft Crypto API
Flash Memory	1MB, 2MB up to 8MB
Flash Endurance	At least 20,000 write/erase cycles
Processor	32 bit smart card chip
Memory Space	64KB (EEPROM)
Endurance	At least 500,000 write/erase cycles
Data Retention	More than 10 years
Connectivity	USB 2.0 full speed, Connector type A
Interface	ISO 7816
Power Consumption	Less than 200mW
Operating	0°C ~ 70°C
Temperature	(32°F ~ 158°F)
Storage Temperature	-20°C ~ 85°C
	(-4°F ~ 185°F)
Humidity	0% ~ 100% without condensation
Water Resistance	IPX8 with glue injection (under evaluation)

Feature varies according to product model

Casing Specification





Dimension	53.3mm x 16.5mm x 8.5mm
Weight	6g (without glue injection)
Colour	Red
Material	PC (Polycarbonate)
Label	Inside front side socket
	Size: 20mm x 6mm
	20 mm
Serial Number	Ink printed at back side of the case or laser printed on USB connector
Customization	Alternative casing colour (blue, brown, green, grey, purple, red)
	Glue injection to improve physical resistance *
	Label logo *
	* Require minimum purchase volume



Dimension	57.5mm x 20.5mm x 9.5mm
Weight	10g
Material	ABS
Colour	White
Label	Inside front side socket Size: 25mm x 12mm
Serial Number	Ink printed at back side of the case or laser printed on USB connector
Customization	Alternative casing colour *
	Label logo *
	* Require minimum purchase volume

Certification & Compliance



- RoHS
- Check Point
- Entrust Ready
- USB
- CE
- FCC