

Strong Authentication Solutions & e-Signatures

for

> e-Banking

Over 300 financial institutions around the world use VASCO products - based on Digipass and EMV technology - to secure their internet banking, phone banking, internet brokerage, and m-Banking applications.

> e-Commerce

In collaboration with the major vendors of 3-D Secure™, VASCO brings improved security for e-Commerce consumers. EMV card issuers can re-use cards for advanced authentication for internet and telephone purchasing.

> e-Business

Business-to-Business requires negotiation, integration and trust from all parties involved in order to have a coherent business process. The risk of fraud increases as varying businesses interact over the Internet. VASCO Digipass ensures that the identity of each user is authentic and trusted.

> Networks

VASCO secures the corporate network by enforcing Digipass strong authentication for remote access (Firewall, RADIUS and Access Servers) and VPN users as well as web and custom applications.






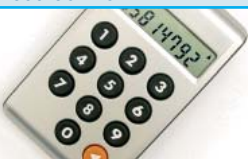

> e-Government

VASCO secures governmental confidential information with Digipass solutions for digital ID cards, tax payment and registered mail.

DIGIPASS: STRONG USER AUTHENTICATION & E-SIGNATURES

Digipass provides strong user authentication and e-signatures and is compatible with more than 50 international vendors for e-Commerce, e-Banking, Networks and e-Government.



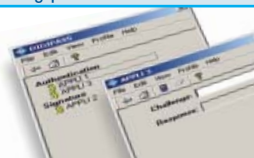

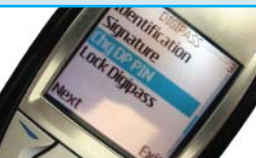
> Strong Authentication & e-Signatures

						
<p>Digipass Go 1, Go 3 > Ultra-portable, sleek, and easy-to-use.</p>		<p>Digipass 250, 260, 300 > Streamlined and designed to fit in the palm of your hand. Intuitive user interface (no user manual required) allows you to generate passwords with a minimal number of key strokes.</p>			<p>Digipass 300 Comfort > The Digipass 300 Comfort is specially designed for people that require a larger visual display and keypad.</p>	

> Strong Authentication, Smart Cards & EMV Solutions

				
<p>Digipass Go 2 > Turn an existing chipcard or memory card into a powerful authentication device with balance reader function.</p>	<p>Digipass 815 PID > Cost effective solution for remote strong authentication with chipcards.</p>	<p>Digipass 800, 820 PID > - Unconnected trusted Personal Chipcard Readers enabling strong two factor authentication and transaction data signing. - Compliant with MasterCard CAP 2004 and VISA Dynamic Passcode standards. - 800: Customizable for legacy cards / 820 PID: Slim design and graphic display.</p>		<p>Digipass 850 > Connectable trusted environment, e-Government. In unconnected mode the Digipass 800.</p>

> Strong Authentication on Virtually any Platform

				
<p>Digipass for Palm, Pocket PC > Adds Digipass security to your pocket PC or Palm device.</p>		<p>Digipass Soft > Provides the same functionality as the hardware Digipass, but resides on the PC.</p>	<p>Digipass for SIM > SIM toolkit enables Digipass authentication on a mobile phone.</p>	<p>Digipass for JAVA > Provides Digipass authentication technology to any mobile phone that supports JAVA.</p>

VACMAN

Authentication Server

VACMAN Controller for Digipass & EMV-CAP

The VACMAN product suite facilitates the integration of Digipass strong authentication into security-critical applications.

Vacman Controller is a toolkit that enables the validation of Digipass and/or EMV-CAP One-Time-Passwords regardless of your preferred communication protocol, database management, Operating System. VACMAN Controller enables your application to implement the virtual token functionality. In order to ensure the privacy of the security keys, the VACMAN Controller can be combined with a wide range of hardware solutions.

AUTHENTICATION SERVICES






Flexibility in customization, scalability & deployment

VASCO provides a complete fulfillment service and customization for large deployments:


- > Initialization and activation
- > Custom logos and colors
- > Scalability & deployment services

> VASCO offers customization services:

- platform and OS integration
- adaption to EMV standard and smart card

	<p>560</p> 	<p>580</p> 	<p>585</p> 	<p>700</p> 	
<p>Digipass 550, 560 > Combines host authentication and support for multiple languages.</p>		<p>Digipass 580 > Supports complex characters such as Chinese, Cyrillic, Thai etc. Digipass 585 > Same functionalities as the Digipass 580 but with added OTP feature or "help" feature without opening the hard cover.</p>		<p>Digipass 700 > The Digipass 700 allows very complex security algorithms, using default values (own account, time stamp, etc.).</p>	

> Digipass Pack

	
<p>Virtual Personal Chipcard Reader (PCR). Ideal for PKI, Government, e-Commerce, and e-Banking applications. This mode provides same functionalities as described for PCR. Can also be used in connected mode.</p>	

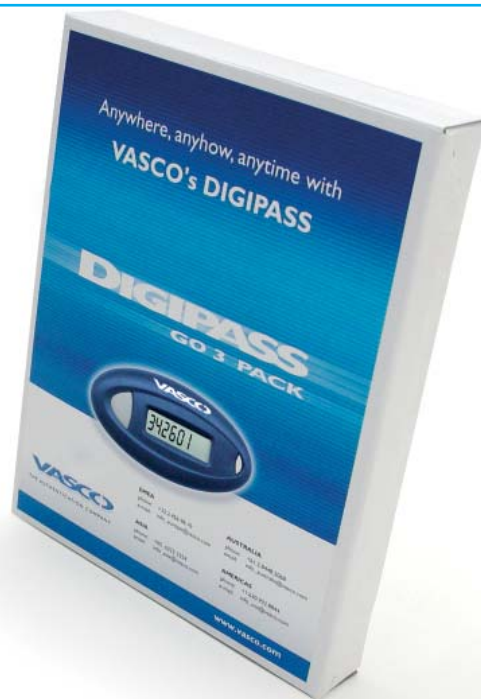
The Digipass Pack addresses the security gap caused by using static passwords for user authentication. The Digipass Pack enforces two-factor authentication to any network environment using the RADIUS protocol. Typical environments include VPN, firewall, and remote access users.

The Digipass Pack also brings strong authentication to Windows networks and web applications such as Outlook Web Access (OWA) and Citrix.

The Digipass Pack has been certified with Avaya, Check Point, Cisco Systems, F5, Netscreen, Novell, Watchguard, Lotus Domino, etc.

Please contact VASCO for the latest certification status.

Digipass Pack is available for Digipass Go 1, Digipass Go 3, Digipass 260, Digipass 300 and Digipass Soft.



<p>VIRTUAL DIGIPASS</p>	
	

Virtual Digipass >
Server based solution to provide strong authentication via SMS, pager or another delivery method.

VACMAN Middleware












VACMAN Middleware provides Digipass strong authentication for corporate network access. VACMAN Middleware also offers Virtual Digipass feature as a backup or primary strong authentication method via SMS or pager. It is designed for a quick and easy installation into your network infrastructure.

... Passwords and e-Signatures
... graphical user interface.
... to guarantee the integrity and
... hardware security modules.

> VASCO provides integration assistance and support services

- custom form factor development
- multiple language support

DIGIPASS PRODUCT OVERVIEW TABLE

		TIME/EVENT/CHALLENGE BASED ALGORITHMS	CHALLENGE / RESPONSE	RESPONSE ONLY	DES / (3)DES	AES	UNLOCKING VIA CHALLENGE / RESPONSE	UNLOCKING PUK CODE	LANGUAGE SUPPORT	N°OF APPLICATIONS	ACTIVATION METHOD	EXPECTED LIFETIME (IN YEARS)	DESIGNED FOR	SPECIAL FEATURE
	GO 1	TIME EVENT		✓	✓					1	PROG	5	REMOTE ACCESS	EASY
	GO 2	TIME EVENT		✓	✓	✓			✓	± 5	SMART CARD	5	REMOTE ACCESS	BALANCE READER
	GO 3	TIME EVENT		✓	✓					1	PROG	5	REMOTE ACCESS	EASY
	250	TIME EVENT CHAL	✓	✓	✓		✓			3	PROG	7	BANKING	PORTABLE
	260	TIME EVENT CHAL	✓	✓	✓		✓			3	PROG	7	BANKING	PORTABLE
	300	TIME EVENT CHAL	✓	✓	✓		✓			3	PROG	10	BANKING	LONG TIME BATTERY
	300 COMFORT	TIME EVENT CHAL	✓	✓	✓	✓	✓	✓		3	PROG	10	BANKING	LARGE BUTTONS & DISPLAY
	550	TIME EVENT CHAL	✓	✓	✓	✓	✓	OR ✓	✓	4 x 2	PROG	5	BANKING	MESSAGES IN OWN LANGUAGE
	560	TIME EVENT CHAL	✓	✓	✓	✓	✓	OR ✓	✓	4 x 2	PROG	5	BANKING	MESSAGES IN MULTIPLE LANGUAGES
	580	TIME EVENT CHAL	✓	✓	✓	✓	✓	OR ✓	✓	4 x 2	PROG	5	BANKING	ENHANCED DISPLAY FEATURES
	585	TIME EVENT CHAL	✓	✓	✓	✓	✓	OR ✓	✓	4 x 2	PROG	5	BANKING	OTP WITHOUT PIN
	700	TIME EVENT CHAL	✓	✓	✓		✓		✓	8	PROG	5	BANKING	COMPLEX SIGNATURES
	800	TIME EVENT CHAL	✓	✓	✓	✓			✓	± 5	SMART CARD / PROG	5	REMOTE ACCESS E-COMMERCE BANKING	BALANCE READER
	815 PID	EVENT CHAL	✓	✓	✓	✓			✓	± 3	SMART CARD / PROG	5	REMOTE ACCESS E-COMMERCE BANKING	BALANCE READER
	820 PID	EVENT CHAL	✓	✓	✓	✓			✓	± 5	SMART CARD / PROG	5	REMOTE ACCESS E-COMMERCE BANKING	BALANCE READER
	850	TIME EVENT CHAL	✓	✓	✓	✓			✓	∞ VIA PC	SMART CARD / PROG	5	REMOTE ACCESS E-COMMERCE BANKING / PKI	USB CONNECTION
	FOR PALM	TIME EVENT CHAL	✓	✓	✓		SERVER			∞	ONLINE	NOT APPLICABLE	REMOTE ACCESS	MULTI PROFILES
	FOR POCKET PC	TIME EVENT CHAL	✓	✓	✓		SERVER			∞	ONLINE	NOT APPLICABLE	REMOTE ACCESS	MULTI PROFILES
	DIGIPASS SOFT	TIME EVENT CHAL	✓	✓	✓	✓	SERVER			∞	ONLINE	NOT APPLICABLE	REMOTE ACCESS	MULTI PROFILES
	FOR SIM	EVENT CHAL	✓	✓	✓			✓		8	ONLINE	NOT APPLICABLE	BANKING	MOBILE BANKING
	VIRTUAL DIGIPASS	TIME EVENT		✓	✓		SERVER			∞	ONLINE	NOT APPLICABLE	BANKING / E-COM-MERCE	EASY

VASCO designs, develops and supports patented “Identity Authentication” products for secure network access, e-business and e-commerce.

VASCO’s user authentication software is carried by the end-user on its Digipass products which are small “calculator” hardware devices, or in a software format on mobile phones, other portables devices, and PC’s.

At the server side, VASCO’s VACMAN products guarantee that only the designated Digipass user gets access to the application.

VASCO’s target markets are the applications and their several hundred million users using fixed password as security.

VASCO’s time-based system generates a “one-time” password that changes with every use, and is virtually impossible to hack or break.

With over 13.5 million current users of its Digipass products, VASCO has established itself as a world-leader for strong authentication with over 300 international financial institutions, approximately 1500 blue-chip corporations, and governments representing more than 80 countries.



THE AUTHENTICATION COMPANY

Belgium

phone: +32.2.456.98.10
email: info_europe@vasco.com

The Netherlands

phone: +31 73 691 88 88
email: info_europe@vasco.com

USA (Boston)

phone: +1 508.366.3400
email: info_usa@vasco.com

Australia (Sydney)

phone: +61 2 8920 9666
email: info_australia@vasco.com

Singapore

phone: +65 6323 0906
email: info_asia@vasco.com

China (Shanghai)

phone: +86 21 6443 2697
email: info_asia@vasco.com

Digipass & VACMAN are registered trademarks of VASCO Data Security. All trademarks or trade names are the property of their respective owners. VASCO reserves the right to make changes to specifications at any time and without notice. The information furnished by VASCO in this document is believed to be accurate and reliable. However, VASCO may not be held liable for its use, nor for infringement of patents or other rights of third parties resulting from its use. © 2005 VASCO. All rights reserved.