right people in right place at right time

COSEC DOOR PVR
PALM VEIN READER

Biometric devices used for access control and time-attendance helps to enhance security and productivity of an organization. However, most of them have to compromise between the security it offers and convenience it provides. The compromise could be on having lower accuracy, higher rejection ratio, needing physical contact, hygiene concern and possibility of copying the biometric pattern.

PRESENTING COSEC DOOR PVR

a highly secure and contactless biometric device that works by reading the vascular pattern of the palm. These patterns are unique to each individual and exists underneath the skin layer so they cannot be forged. Being contact less and technologically advanced, it is appropriate for places like hospitals, chemical industries, nuclear stations, factories, corporate houses, R&D centers, financial institutes and many others where security and hygiene cannot be compromised.

MATRIX
SECURITY SOLUTIONS

PALM VEIN IS NOT A PALM READER

Palm vein authentication works by comparing the pattern of veins in the palm of a person

When this palm is illuminated with near infrared light, the veins absorb this light and reduces the reflection rate causing them to appear as a black pattern.

This black pattern is then extracted using image processing for registration and verification

Contactless Identification

The completely contactless feature of palm vein technology makes it most suitable for areas like public places, medical facilities etc. where a high level of hygiene is required. It eliminates any fear that people might have about catching something contagious from others. Contactless feature also makes it suitable for chemical industries, mines where contact with the device is not suitable.

Different Identification and Verification Modes

COSEC DOOR PVR gives the flexibility to an organization to use the device in 1:1 or 1:G mode to verify a user to improve security or in 1:N mode for identification of the user. The flexibility of using the door in 1:1 or in 1:G also helps increase the speed of identification and authentication.

Higher Security

Palm vein reader technology works on reading vascular patterns of a palm which are unique to each individual. These patterns exist inside the skin layer therefore it cannot be stolen or copied. Another reason for higher level of security offered is a false acceptance rate of less than 0.00008% and a false rejection rate of less than 0.01%.

Insensitive to Extraneous Factors

This palm vein reading sensing technique makes it versatile to be used in the most extreme conditions. The palm vein sensor is insensitive to dirt, grease, scratch, hand lotion, abrasions etc. making it suitable for all kinds of industries, mines, factories, manufacturing units, construction sites etc.

Wireless and Wired Connectivity

The option of wired and wireless connectivity between the controller and the server allows the organizations to use their existing infrastructure. This also helps organizations to use the door at remote locations where wired connectivity is not possible.

Complete Security Solution

Different interfaces available in COSEC DOOR PVR allow it to provide a complete security solution. Along with time-attendance, this can be used to provide access control with the help of exit reader and exit switch port in combination with door sense and door lock port. It also allows connection with the fire alarm panel and DVR which uses the Aux In/Out port to further enhance security.

Detachable Hand Guide

To increase the speed and accuracy during the enrollment process COSEC DOOR PVR comes with a detachable hand guide. This hand guide assists the user in placing their palm at the precise location for accurate enrollment as well as verification of the palm. The detachable feature allows the organization to remove the hand guide once the users get accustomed to the placement of the palm for identification.

Hospital

is a healthcare institution where hygiene is of utmost importance. In such a place, patients/visitors can easily get infected by germs. Also a high level of security is needed for ICU, operation theater where access shouldn't be allowed to anyone other than hospital staff as life of patients is at stake.

Benefits
- Hygienic as it is a contact less device
- Improves security for vital areas like ICU, operational theater
- Increases productivity of staffs
- Protects expensive medical instruments
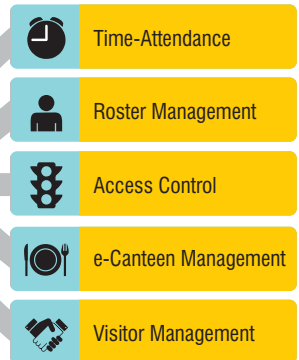- Round the clock access control

R&D Center

is a place for developing new products using the latest technology with a talented human workforce. It is of high importance for them to protect data and assets with full proof security devices.

Benefits
- Increases security of valuable assets, data and employee in multifold
- Minimizes forgery
- Round the clock security

- Time-Attendance
- Roster Management
- Access Control
- e-Canteen Management
- Visitor Management

Technical Specifications

Credential Support	Card, Palm Vein & PIN
User Capacity	10,000
Templates per User	Up to 2
Palm Template Capacity	20,000 Templates
Cards per User	2 (Any Type)
Type of Card	Smart and Proximity
LCD (128x64 Dot-Matrix)	Yes
Touch Sense Keys (16)	Yes
Verification Method	1:1, 1:N and 1:G
Events Buffer	1,00,000
Wireless Connectivity	Wi-Fi, 2G, 3G, GPRS, CDMA
USB	2 Ports
Communication	Ethernet
Communication Speed	10/100Mbps on Ethernet
Tamper Detection	Yes
Buzzer	Yes
LED Indication	4 LEDs (Status, Alarm, Allowed and Denied)

External Reader	1 Port for Card Reader
External Reader Interfaces	RS-232 and Wiegand
External Reader Power	12VDC@0.5A
Exit Switch Port	Yes
Door Status Sense	Programmable NO, NC, Supervised
Door Lock Relay	Relay SPDT, Form C, 1A@30VDC
Door Lock Power	Internal 12VDC@0.5A or External
Auxiliary Input Port	Programmable NO, NC, Supervised
Auxiliary Output Relay	Relay SPDT, Form C, 1A@30VDC
CPU	1 GHz ARM Cortex based Processor
Memory	256MB Flash + 512MB DDR3 RAM
Input Power	12VDC@2A
Dimensions (WxHxD)	100×220×55mm (3.9"x8.7"x2.2")
Weight	0.49Kg (1.07Lbs)
Environment	-10°C to +50°C (14°F to 122°F), 5% to 95% RH Non-Condensing

Palm Vein Sensor

Reading System	Reading by Near-Infrared Light
Dimensions (W×H×D)	35×27×35mm (1.3"x1.0"x1.3")
Scope of Capture	Entire Palm
Capturing Distance	40 to 60mm (1.5" to 2.3")
Drip-Proof	Yes
FRR	< 0.01%
FAR	< 0.00008%
Encryption	AES (Cryptography > 128 bit)

Cards Support

Low Frequency (125KHz):
EM PROX, HID PROX

High Frequency (13.56MHz):
MIFARE 1k, MIFARE 4k, HID iCLASS 2k/2,
HID iCLASS 16k/2, HID iCLASS16k/16

COSEC DOOR PVR Interfaces

Wireless

Wiegand/RS-232 — Exit Reader
Power Supply

Door Lock Port — Door Lock
Power Supply

Exit Switch Port — Exit Switch

Aux Input Port — Smoke Detector

Aux Output Port — DVR

USB Port — USB Drive

COSEC Application Server

Power Supply

ABOUT MATRIX

An ISO 9001 Company, Matrix is a leader in Telecom and Security solutions for modern businesses and enterprises. An innovative, technology driven and customer focused organization; the company is committed to keep pace with the revolutions in the telecom and security industries. With around 30% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products like IP-PBX, Universal Gateways, VoIP Gateways and Terminals, GSM Gateways, Access Control and Time-Attendance Systems, Video Surveillance System and Fire Alarm Systems. These solutions are feature-rich, reliable and conform to the international standards. Having global foot-prints in Asia, Europe, North America, South America and Africa through an extensive network of more than 500 channel partners, Matrix ensures that the products serve the needs of its customers faster and longer. Matrix has gained trust and admiration of more than 350,000 customers representing the entire spectrum of industries. Matrix has won many international awards for its innovative products.

MATRIX
SECURITY SOLUTIONS

For further information, please contact:

V1R1 Jan,13

Due to continuous technology upgradations, product specifications are subject to change without notice.