NUTECH SOLUTIONS

Warm Welcome

Expect More

Presentation Agenda

- COSEC Access Control

- Applications

- COSEC Solution

- Key Features

  - ✓ Advanced Access Control

  - ✓ Emergency Handling

  - ✓ Monitoring and Controlling

  - ✓ Hardware

- Access Control Reports and Features List

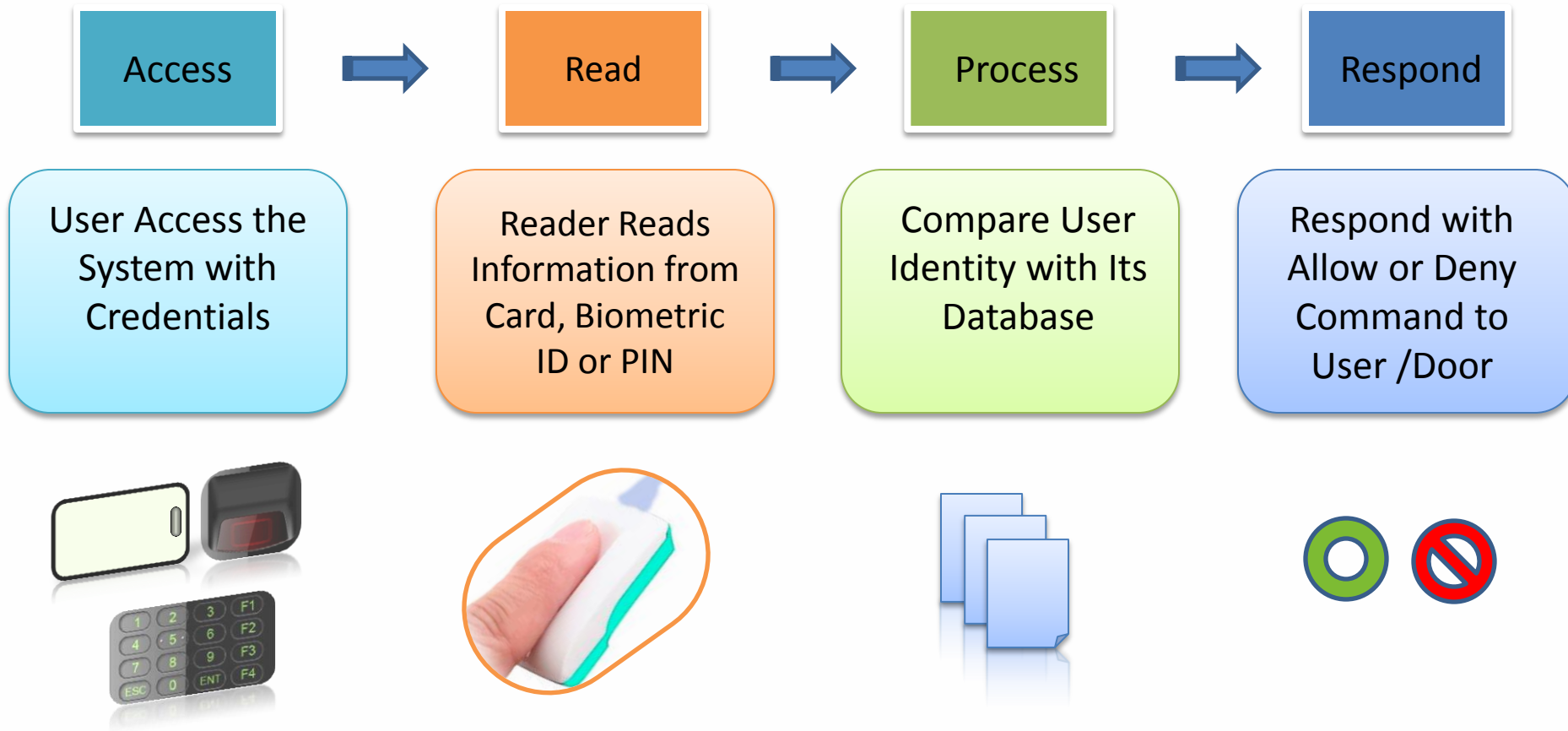# COSEC Access Control

What is Access Control?

- Prevent Unauthorized Entry

- Protects and Preserves Enterprise's Resources

- Allow Authorized People Entry at Specified Time

- Round the Clock Security

What is COSEC Access Control?

- Advanced Access Control for SOHO, SMB, SME and LE

- Fingerprint, Palm Vein, Card and PIN

- Time, Zone and User based Access Control

- Access Zone, Access Level and Time Zone

- Employee-wise Access Rights

- Higher Security in Sensitive Area

- Alarm Monitoring and Supervision

How Access Control Works?

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Access	Read	Process	Respond

User Access the System with Credentials

Reader Reads Information from Card, Biometric ID or PIN

Compare User Identity with Its Database

Respond with Allow or Deny Command to User /Door

Benefits of Access Control System

- Higher Security for Organization and Employees

- Protects Enterprise Assets

- Restricts Unauthorized Access

- Eliminates Lock and Key Problems

- Provides Audit Trail

- Complete History Logging

- Monitor Status of Devices throughout a Facility

- Reduce Cost of Security Personnel

Why COSEC Access Control?

- Deliver Advanced Security Features

- Centralized Monitoring and Control

- Superior Control over Employees and Visitor Access

- User-wise Access Rights

- User, Zone and Time based Access Control

- Input and Output Port Linking

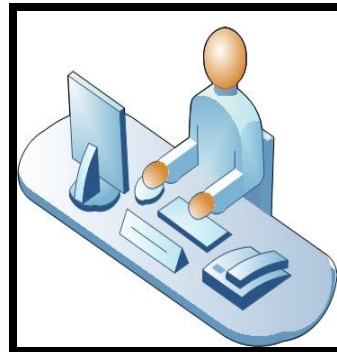- Integration with Fire Alarm Panel, Surveillance System etc.

Target Customers...

NUTECH SOLUTIONS

Hospitals

Small Offices

Corporate Offices
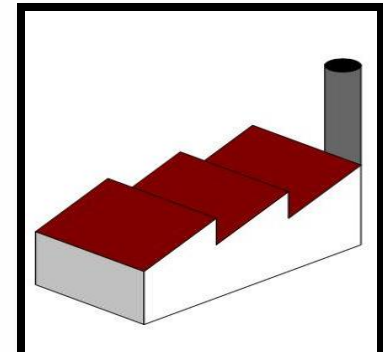
R & D Labs

Government Organizations

Financial Institutes

Shopping Malls

Factories
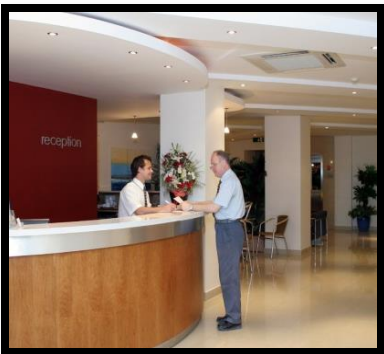
Target Customers...

Remote Sites

Retail Stores

Clubs

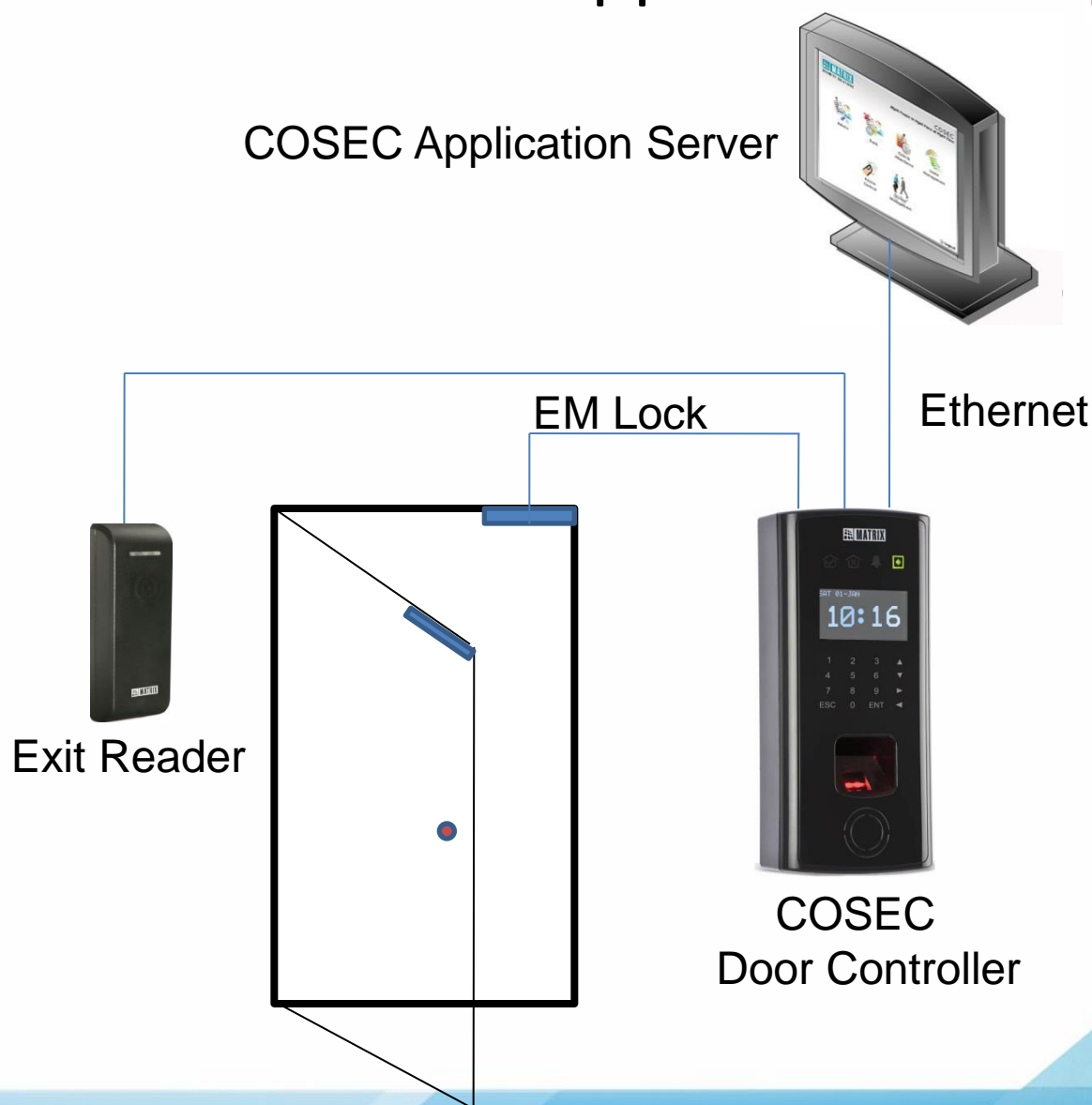**Educational Institutes**

Hotels

Server Rooms

And Many More...

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Applications

Basic Access Control Application

COSEC Application Server

EM Lock

Ethernet

Exit Reader

COSEC
Door Controller

Multi Floor Application
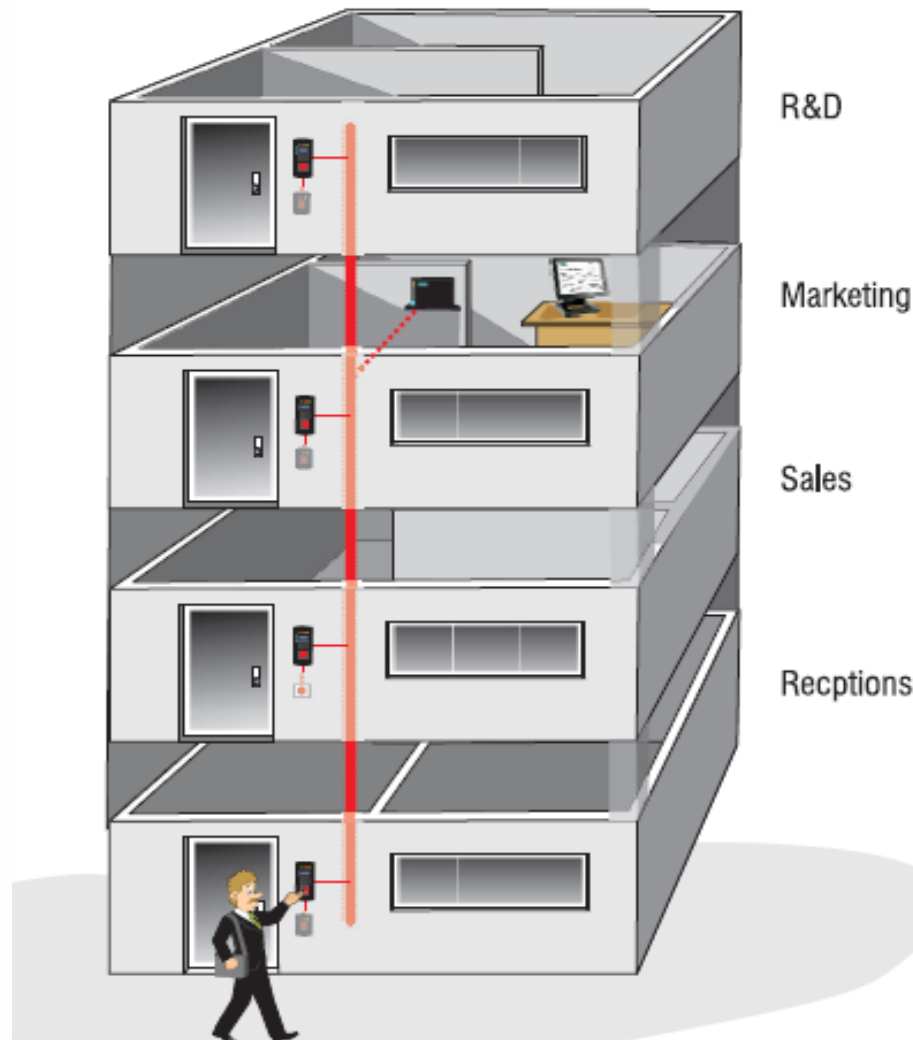
Campus Application

NUTECH SOLUTIONS

Canteen

Head Office

R&D Lab

COSEC Server

LAN/WAN INTERNET

Door Controller

Factory
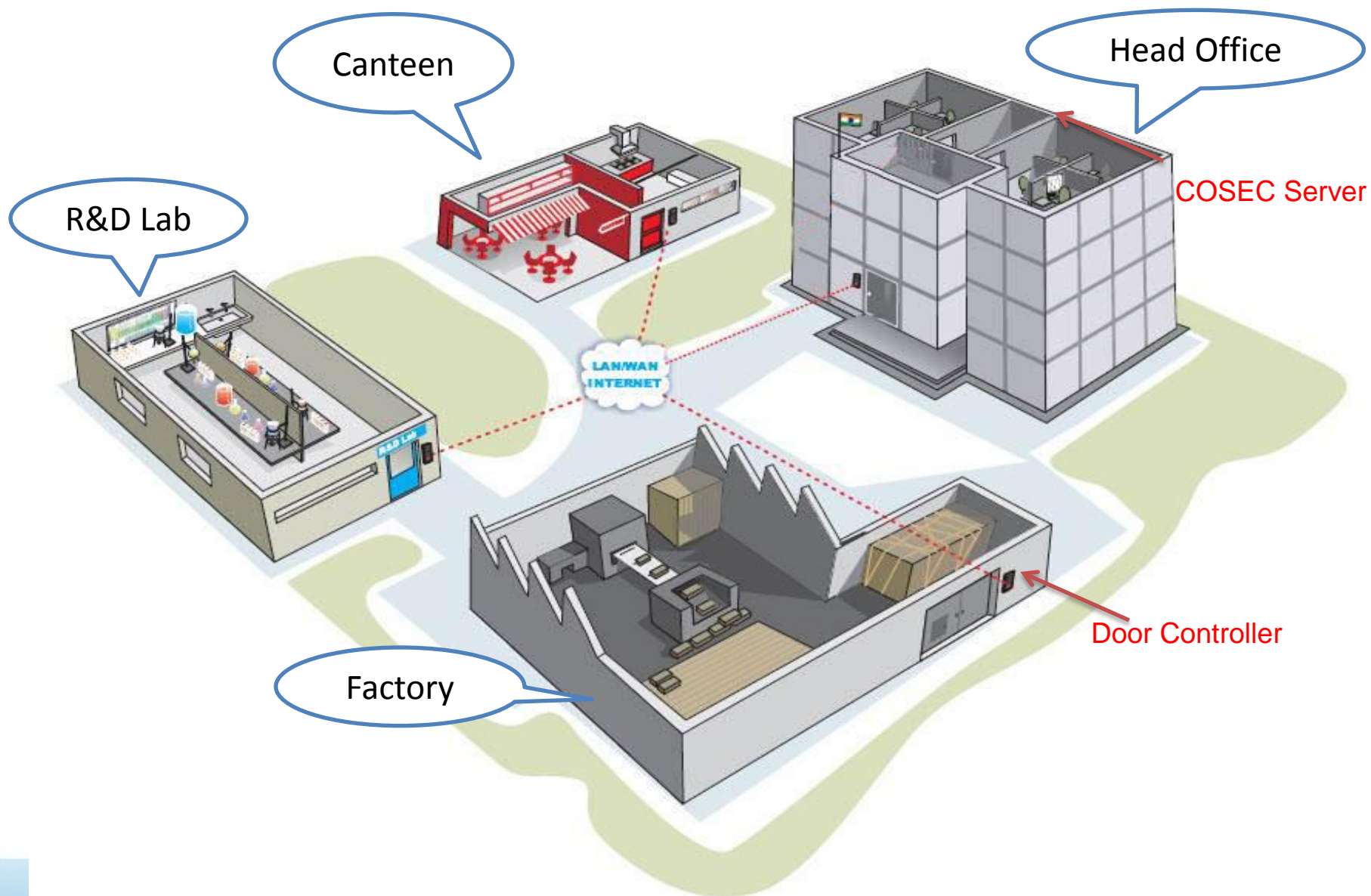
COSEC Layered Architecture

NUTECH SOLUTIONS
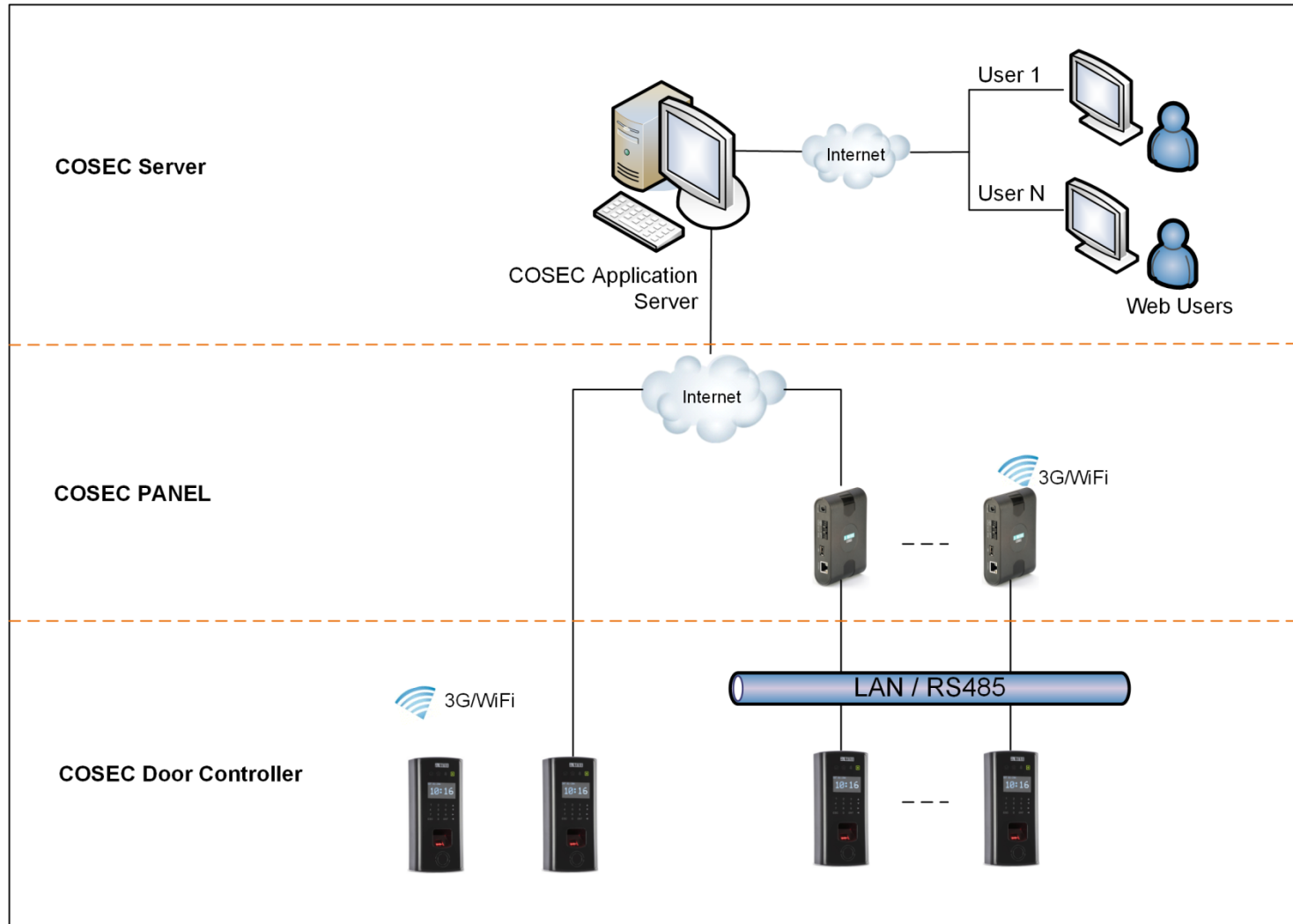
COSEC Application Software

Access Control Module

Time-Attendance Module

eCanteen Management Module

Visitor Management Module

Leave Management Module

Roster Management Module

COSEC PE
Up to 100 Users

COSEC GE
Up to 500 Users

COSEC PLATFORM

COSEC ME
Up to 1000 Users

COSEC LE
Up to 1 Million Users

COSEC Hardware Solution

COSEC Door Series Models

CAP   FOP   FOW   PVR

COSEC Door Connectivity

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Wi-Fi

Ethernet Port

Touch Sense Keypad

USB Ports

Power Supply

Exit Reader Port

Relay Port

Exit Switch Port

Aux Input Port

Aux Output Port
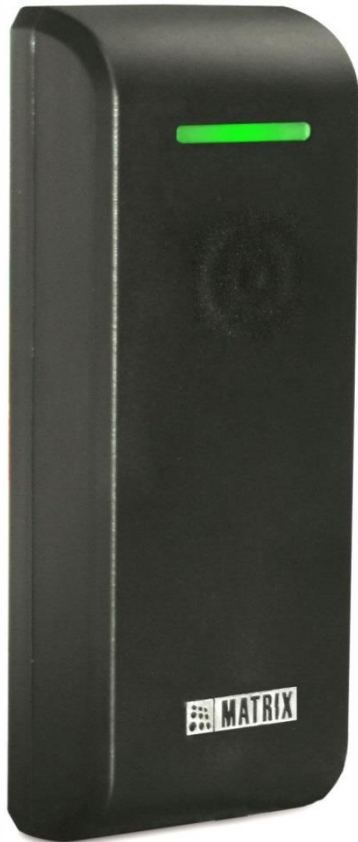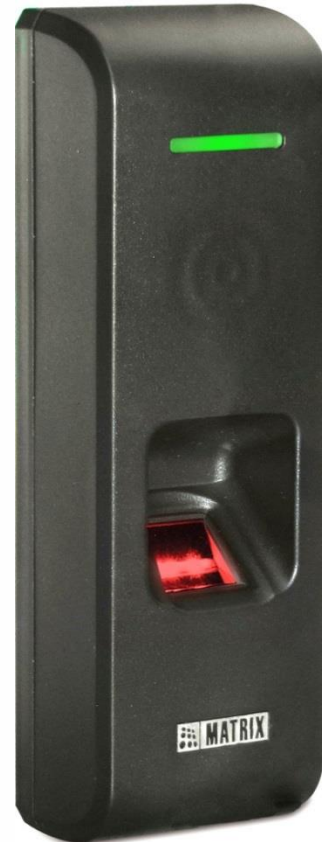
COSEC PATH Series Models

DCCX

DCFX

X = E: EM Proximity Card, I: HID iClASS Card, M: Mifare Smart Card

COSEC PATH Connectivity

COSEC NGT Series Model

NGT FCX

COSEC NGT Connectivity

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Wi-Fi

3.1 MP Camera

Ethernet Port

7" Touch Sense LCD

Voice Guidance

USB Ports

Exit Reader Port

Relay Port

Exit Switch Port

Aux Input Port

Aux Output Port

COSEC VEGA Series Model

NUTECH SOLUTIONS

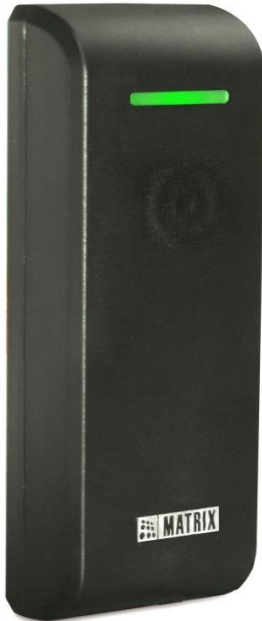COSEC VEGA FAX   COSEC VEGA CAX   COSEC VEGA FTX

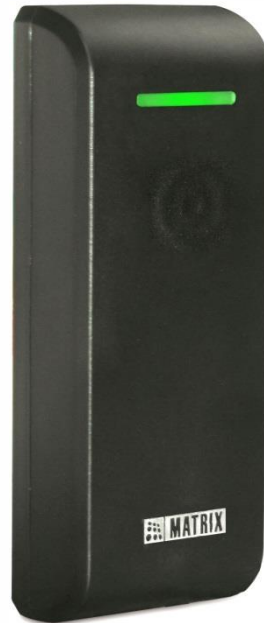# COSEC VEGA Connectivity
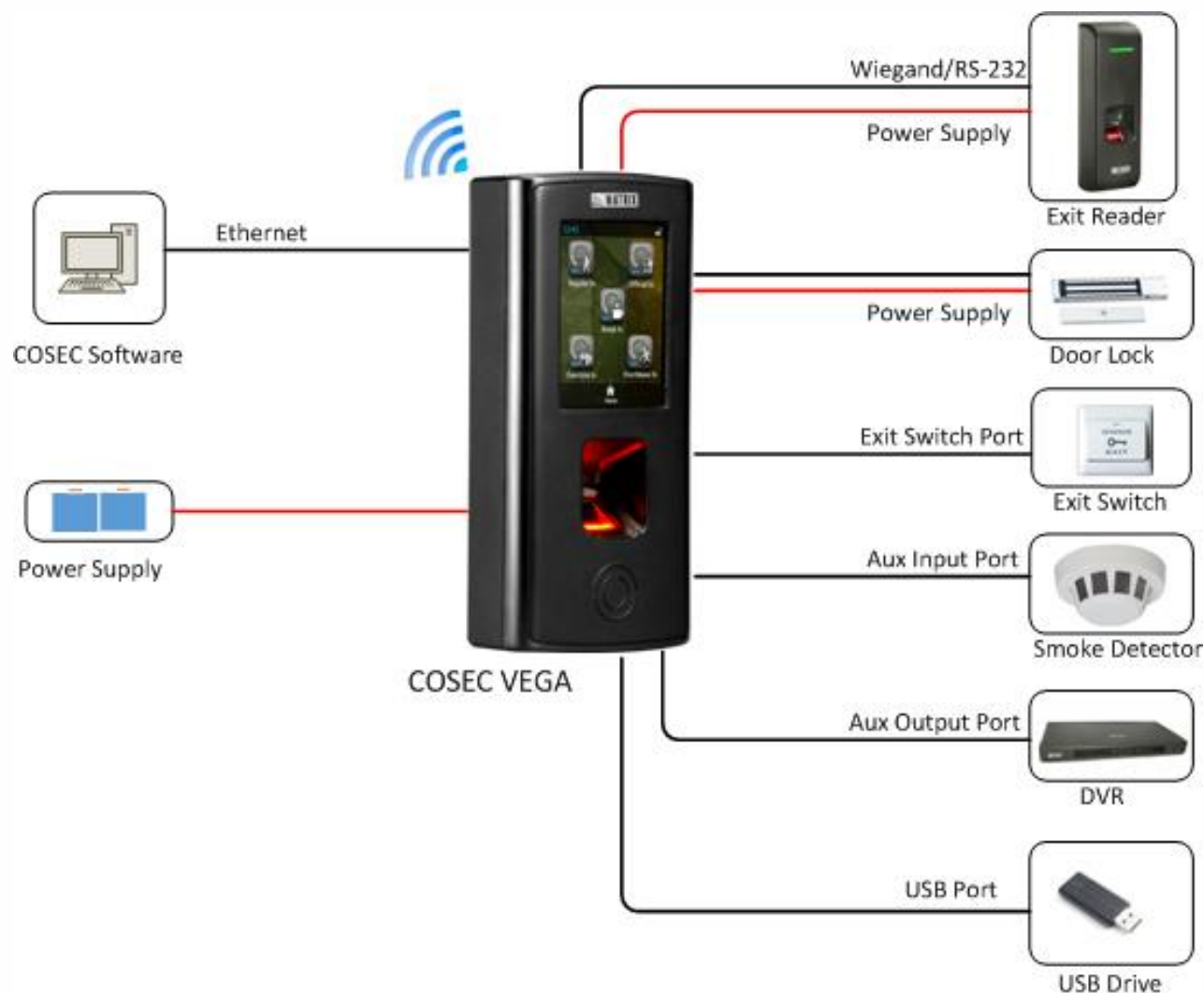
COSEC Reader

Exit Reader

- Fingerprint or Contactless Card Reader

- Wiegand and RS-232 Interface

- Allowed, Denied, Status and Alarm LEDs

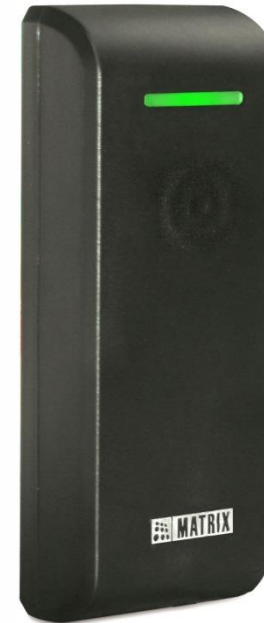- Built-in Buzzer

- Power Supply from COSEC Door

Card Based Readers

COSEC PATH RDCE   COSEC PATH RDCM   COSEC PATH RDCI

Fingerprint Based Readers
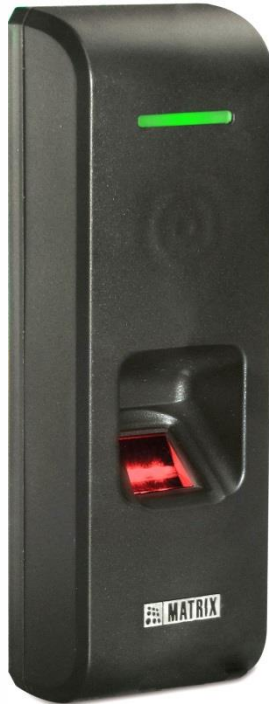
COSEC PATH RDFE   COSEC PATH RDFM   COSEC PATH RDFI

COSEC PANEL LITE

- Controls up to 75 Door Controllers

  - ✓ Maximum 75 Door Controllers on Ethernet

  - ✓ Maximum 32 Door Controllers on RS-485

- Ethernet, RS-485, Wi-Fi and 3G Interface

- 25,000 Users Capacity

- Store 1,00,000 Events in Log

- Supervised Alarm Input Port and Auxiliary Output Relay Contact

- Built-in USB Port

- Audio Visual Indication in terms of LEDs and Buzzer

When COSEC PANEL LITE is Required ?

- When More than 2000 Users per Door Controller are Required

- Greater than 50,000 Local Events Storage is Required

- When below Additional Security Features are Needed:

✓ Access Groups	✓ Home Zone
✓ Access Levels	✓ Visit Zone
✓ Day Light Saving	✓ Input-output Ports Link
✓ Dead-Man Zone	✓ Man Trap
✓ Do Not Disturb	✓ Soft Override
✓ Duress Detection	✓ Time Zone based Access
✓ Who's In	✓ Guard Tour

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COSEC PANEL LITE Connectivity

COSEC Card Personality Module

- Pluggable Card Reader Module

- Inserted at the Backside of COSEC Door Controller and COSEC READER CA

  - ✓ EM PROX
  - ✓ HID PROX
  - ✓ HID iCLASS
  - ✓ Mifare
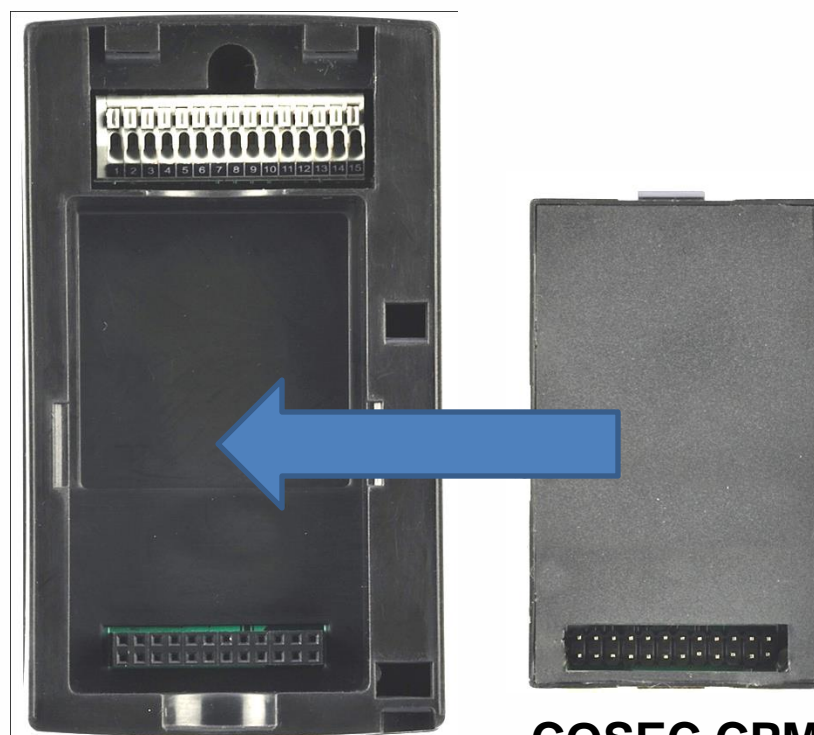
COSEC CPM

Electronic Lock

- COSEC Door Controller Supports Various Electronic Locks

  - ✓ Electro Magnetic Lock

  - ✓ Bolt Lock

  - ✓ Strike Lock

Key Features

Access Group

- Group of Persons Carrying Similar Work Profile

- Easy to Assign Same Access Policies

- Supports up to 99 Access Groups

Access Group-1

Access Group-2
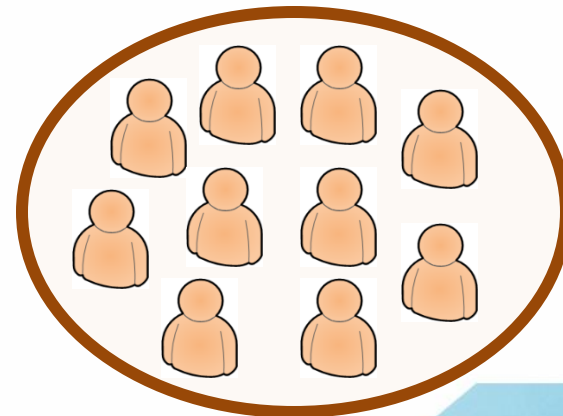
Access Zone

- Controlled Area to Keep Out Unauthorized Users

- Multiple Zones can be Created on Requirement

- Creation of Sub Zones or Logical Zones Inside a Single Zone

- Various Time based Access Policies can be Assigned to a Zone

Dispatch	Documentation	☐ Main Zones
QC	Hardware	☐ Sub Zones
Production	**R & D**	
Manufacturing	Software	
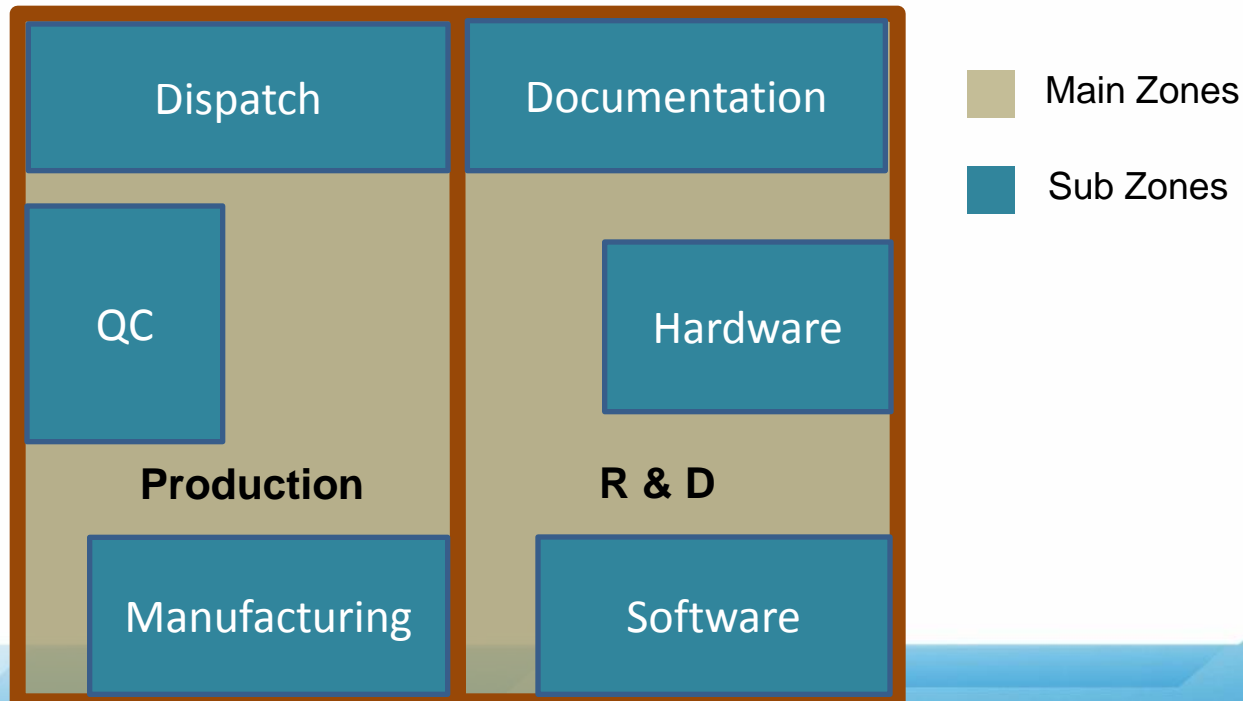
Access Levels

- Give Rights to a User to Enter into a Controlled Area or a Zone

- Up to 15 Access Levels for Zones and Users

- If User Access Level is Higher than or Equal to Zone Access Level, User is Allowed in that Zone

- Different Access Levels During Working Hours, Break Hours and Non-working Hours

Access Level based Access

Zone Access Level 8
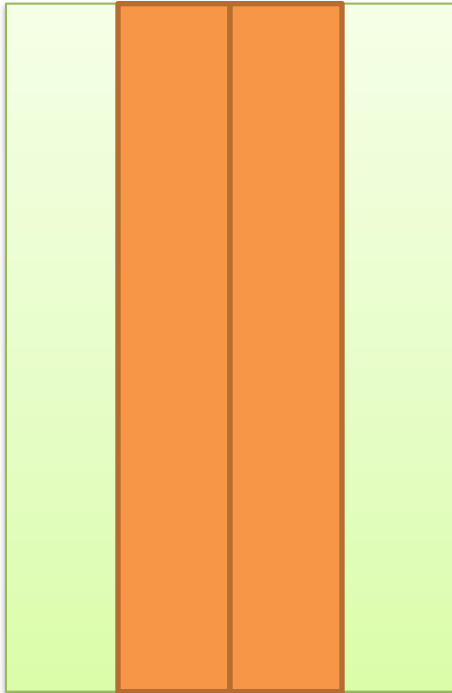
User Access Level =>8

Home Zone

- Pre-defined Area for an User to Work

- Allow User to Access the Zone without Checking his Access Level during Working and Break Hours

- User's Access Level is Checked During Non-Working Hours

Zone Access Mode

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- Various Zone Access Modes to Enable Users to Access a Zone

- Administrator can Select more than One Mode for Higher Security

- Flexibility to Select Zone Access Mode
  - ✓ Card
  - ✓ Biometric
  - ✓ PIN + Card + Biometric
  - ✓ Card + Biometric
  - ✓ Card + PIN
  - ✓ Biometric + PIN
  - ✓ Any
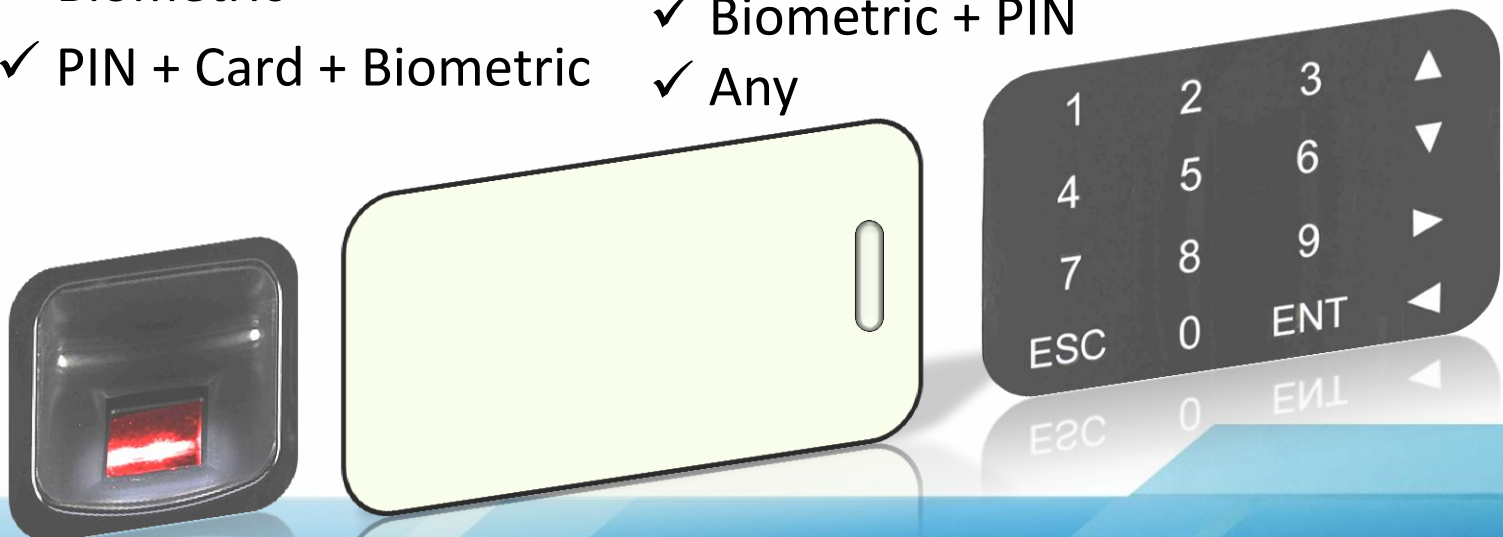
2-Person Access

- Access is Allowed only when Two Authorized Persons Use their Access Rights within a Defined Amount of Time

- Maximum 99 Groups with 20 Users in Each Group

- Useful for High Security Areas like ATM, Record Room, Safe Deposit Vault etc.

Server Room
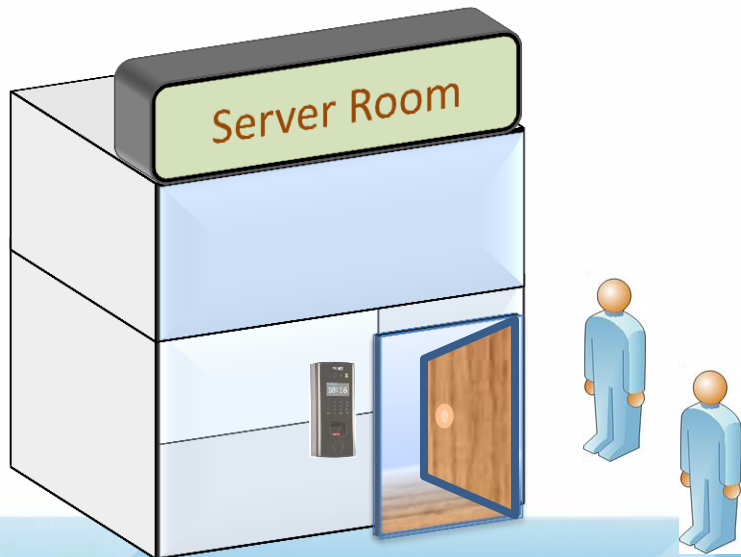
First-In User

- Door Opens Only after Designated Person Make the First Entry

- 4 First-in User Lists with 25 Users in Each List

- Useful for Areas where Supervisor needs to Make First Entry followed by Workers
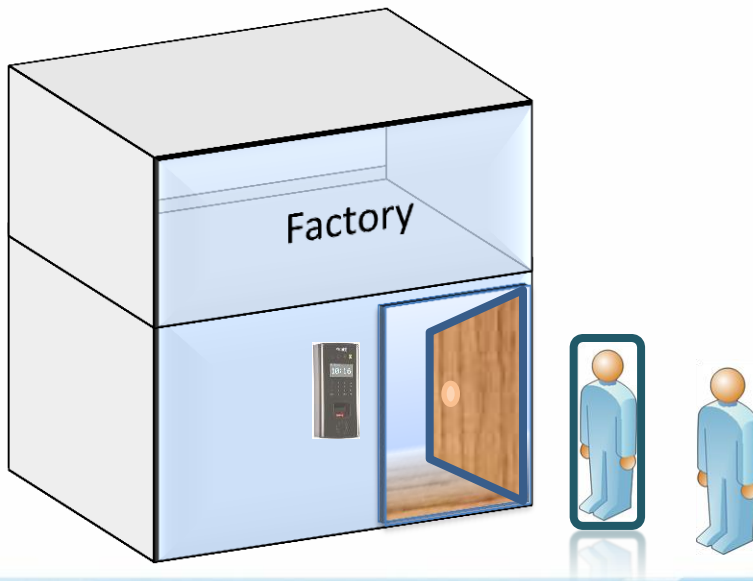
Occupancy Control

- Controls Number of Users in a Controlled Area or a Zone

- Users are Restricted after Pre-defined Number is Reached

- Great Use in Conference Hall, Canteen, Public Hall etc., where Limited Space is Available
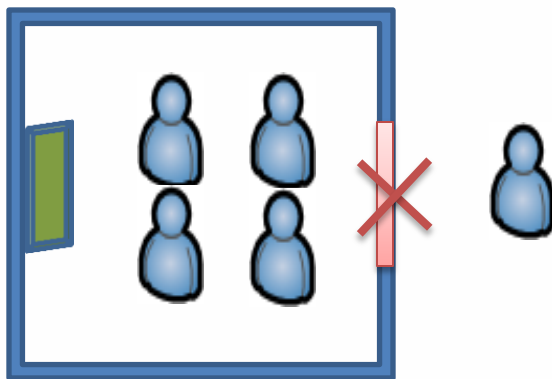
Man-Trap

- Useful for Multiple Doors, Arranged in a Sequence

- Regulate Opening and Closing of Doors

- Manage Traffic and Control Dust and Heat

- Useful to Restrict Intruder from Escaping the Premises Quickly

- Mantrap wait & Door Pulse timer limit is 65535 seconds.

Authorized person will get access through Door A

When Door A is open, Door B remains closed

When Door A is closed, Door B will be open
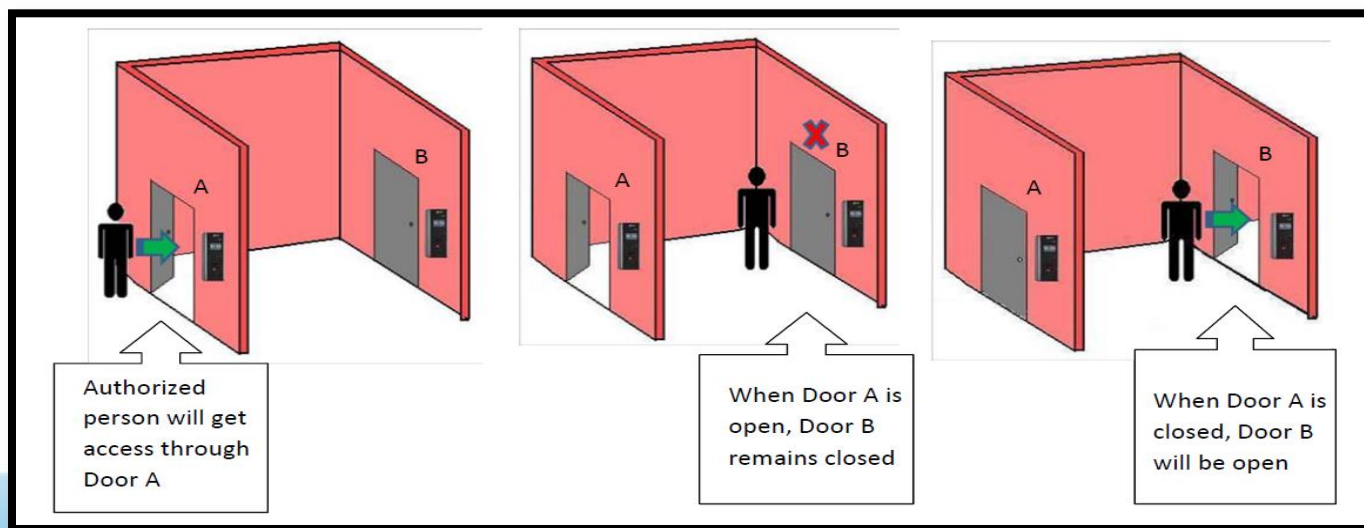
Do Not Disturb(DND) Zone

- User Entry is Restricted in a DND Zone

- Administrator can Declare any Zone as a DND Zone

- Zone Access Level is Changed to Highest

- VIP can Override this Zone

- Useful for Business Meeting, Seminar, Operation Theater etc.

  where Privacy

DND
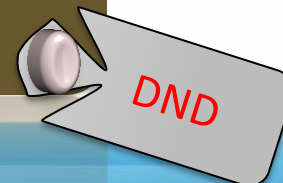
Anti-Pass Back

- Prevent a Card Holder from Passing his Card back to a Second Person to Gain Entry in a Controlled Area

- Card Holder can Make Re-entry only after Exit Mark

- Two Modes:
  - ✓ Anti-Pass Back Local
  - ✓ Anti-Pass Back Global

  - Two Types:
    - ✓ Hard Anti-Pass Back: Does not Allow User but Keep Log in the System
    - ✓ Soft Anti-Pass Back: Allow User with Log In the System

Blocked User

- Blocked Users are Restricted from using their Access Rights

- Access Privileges are Withdrawn Temporarily, but not the Deletion of Identity from the Database

- System Blocks User for
  - ✓ Absentee User
  - ✓ Consecutive Attempts to Access Unauthorized Zone

VIP Access

- Empower User to Access any Controlled Area or a Zone

- Any Person Holding VIP Label has Highest Access Level(15)

- Administrator can Assign VIP Access to any User
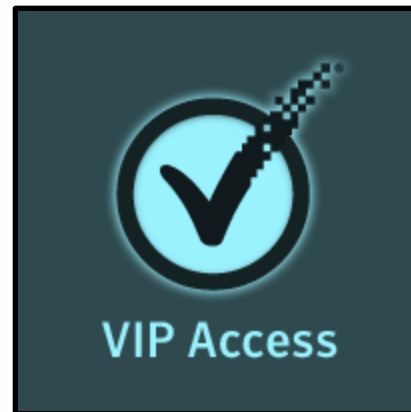
Guard Tour

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- Ensures that Security Guard makes Round of the Facility During Non- working Hours

- Guard has to Show his Identity on Various Check Points on Specified Time; it Generates Alarm if he Fails to do so
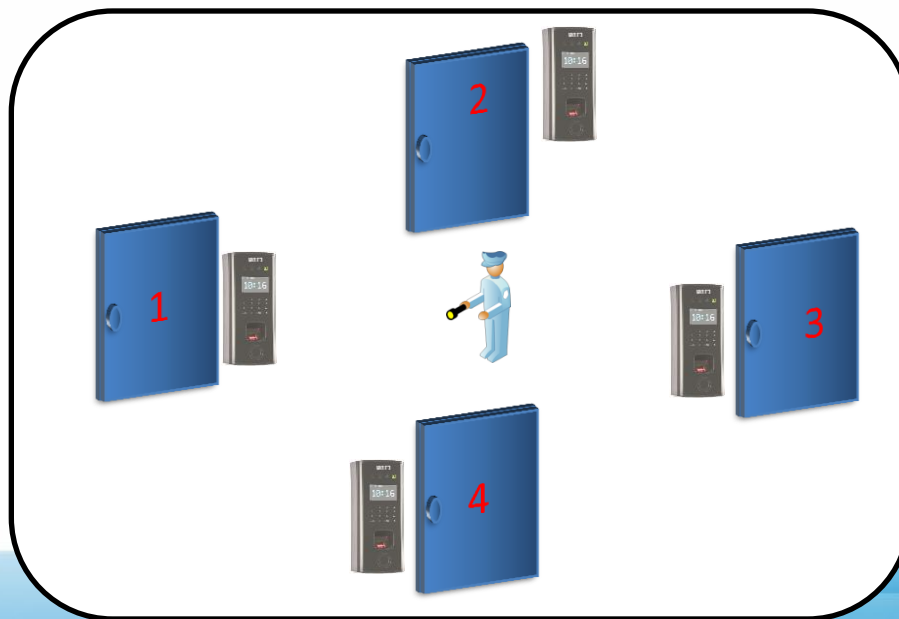
- Record can be viewed later by System Administrator

- System can assign up to Four Cards

Facility Code

- Unique Number String Encoded on Card

- Common Code for Entire Organisation

- System Identify User based on his Basic Identity(Facility Code) to Grant Permission

- Very Useful when System is in a Degraded Mode

Facility Code

23248235641254620

DVR Integration

- Matrix/Dahua DVR can be Integrated with COSEC

- Capture Photograph of an User on Allowed or Denied

- Administrator can Check from Software who have Access the Door

- Very Important for Security and Attendance Purpose

Dead-Man Zone

- Zone or Area where there is a Threat of Person's Physical Safety

- Administrator can Declare any Zone as a Dead-Man Zone

- User has to Show his Identity every time before Expiration of Predefined Time Period

- Once Timer is Expired, Alarm Gets Activated

- Very Useful Feature for Users who are Working in Mines, Chemical Plants, Nuclear Lab etc.

Tamper Detection

- System Generates Alarm on Detection of any Tampering

- Tamper Detection on Door Controller and Reader

- Generates Alarm on Door Controller

- Can be Disabled Temporarily for Maintenance Purpose

- Useful Security Feature

Smart Identification

- It Helps in Overcoming Limitation of Number of Users

- Uses Information Stored in Smart Card

- No Need to Store any Information in Door Controller

- Number of Users Passing through Door Controller Can be Unlimited

Emergency Handling

Degrade Mode

- System Switch into Degrade Mode when PANEL LITE and DOOR Communication Fails

- System Allows Users with their Basic Identity Like Facility Code

- Events are Stored in the Door and Then Transferred to PANEL LITE when System Operation is Restored

System will Switch into Degrade Mode
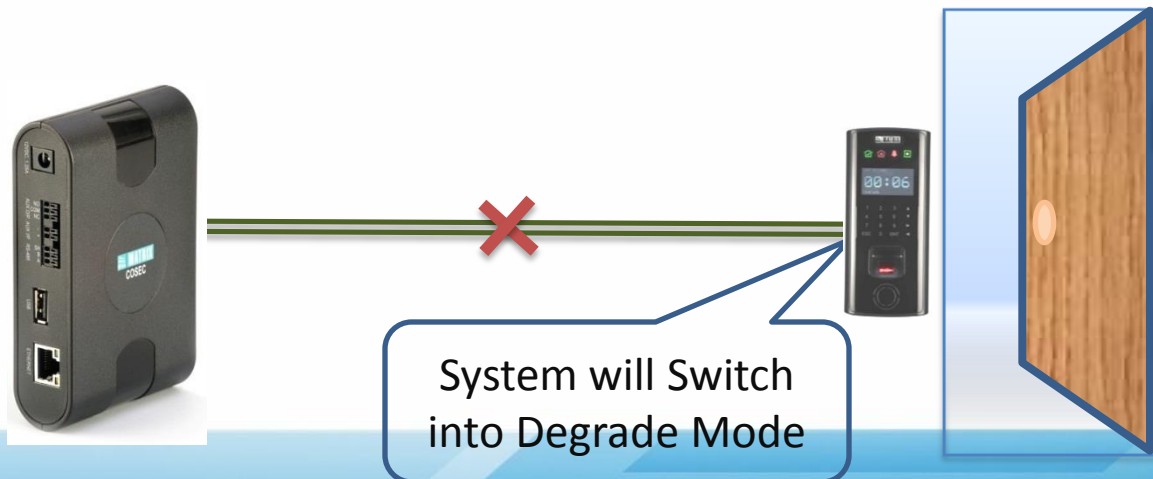
Duress Detection

- Useful Feature when User is Forced to Use his Access Rights Under Threat

- User Need to Dial his Access Code Followed by a Secret Code for Duress Detection

- System Opens the Door and at the Same Time Informs Concerned Person without Giving any Local Alarm

Soft Override Feature

- Deactivate Various Functions Temporary from Monitoring Window

- Temporally Deactivate Functions

- Features can be Disable like:
  - ✓ 2-Person Rule
  - ✓ First-In User Rule
  - ✓ Open Door Lock
  - ✓ Lock Door

Who's In

- Generate List of Users Inside a Controlled Area at that Particular Time

- Useful in Emergency

Matrix Comsec Pvt. Ltd.				Page 1 of 2
Who Is In as on 01/10/2013 12:31:12				
Run by: System Admin			Date: 7/10/2013	12:31
Sr No	User ID	Name	Door	In Time
1	1003	Umesh Talanpuri	CDC PD HO	01/10/2013 09:21
2	1009	Dipti Rathwa	CDC PD HO	30/09/2013 14:06
3	1011	Parika Pandey	CDC PD HO	01/10/2013 09:25
4	102	Akshay Sheth	CDC PD HO	01/10/2013 10:45
5	105	Satish Raje	CDC PD HO	01/10/2013 10:46
6	1050	Anil Modi	CDC PD HO	01/10/2013 08:55
7	1077	Anil Tailor	CDC PD HO	01/10/2013 09:24
8	109	Dhirendra Savla	CDC PD HO	01/10/2013 10:38
9	1095	Abhay Joshi	CDC PD HO	01/10/2013 09:44
10	1109	Shalini Yadav	CDC PD HO	01/10/2013 11:39
11	1112	Kavit Parekh	CDC PD HO	01/10/2013 09:32
12	1124	Smital Patel	CDC PD HO	01/10/2013 08:53
13	1131	Archna Sharma	CDC PD HO	01/10/2013 09:18
14	1135	Riya Giri	CDC PD HO	01/10/2013 09:11
15	1140	Gaurav Lokhande	CDC PD HO	30/09/2013 18:59
16	1143	Anuja Nair	CDC PD HO	30/09/2013 17:38
17	1149	Eshita Tamboli	CDC PD HO	01/10/2013 09:08
18	1153	Reshma Tiwari	CDC PD HO	01/10/2013 09:22

Monitoring and Controlling

COSEC Live Monitoring Window

- Real-time Events Monitoring and Control

- Live Status of Door Controllers and PANEL LITE

- Alarm Monitoring and Control

- Firmware Up gradation

- Temporary Deactivate Function/Features

- Auxiliary Input and Output Status

- Automatic Events Download

Input-Output Groups and Linking

- Link Input and Output Port of the COSEC Door Controller and PANEL LITE

- Automatically Activate Output Port on Activation of Input Port

- Program Various Functions Like:

  ✓ Unlock Door on Fire Detection

  ✓ Capture User Photo when he is Allowed

  ✓ Start Video Recording on any Motion Detected

Alarm

- Various Alarms on the Occurrence of Pre-defined Situations

- Available on both PANEL LITE and Door Controllers

- Built-in Alarm Detection and Management

- Admin can Control, Acknowledge, Clear and Monitor Alarm in a

  Real-time

- Audio Visual Indication in terms of LEDs and Buzzer

Auxiliary Ports

- Auxiliary Input Port for Connecting Smoke Detector, Sensor etc.

- Auxiliary Output Port for Connecting Siren, Strobe etc.

- Available on both PANEL LITE and Door Controllers

- Can be Programmed for Various Applications Like Camera should Start Recording when any Motion is Detected in the Premises

Time-Trigger Function

- Automatically Activate Output Port based on Pre-defined Time

- Used for many Time based Applications

- School Bell, Siren, Camera etc. can be Activated without any Manual Involvement
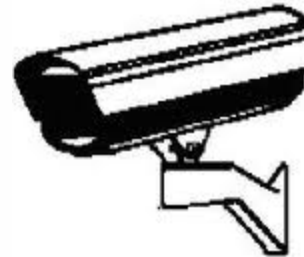
Route based Access Control

- All Route related Information Like Sequence of Door Controllers is Stored in Smart Card

- When this Feature is Enabled, the Door Controller will Verify the Information Stored in the Smart Card

- Whether the User has Passed from All Previous Door Controllers which are Part of the Route; If Yes then only User is Allowed to Access that Particular Door Controller.

- It Increases the Security

Access Control Reports

Access Control Reports List

Reports List

- Access Zone
- Access Group
- Access Group-wise Time Zone
- Functional Group
- Time Zone
- 2-Person Rule
- First-In User
- Guard Tour
- Input Port Group
- Output Port Group
- Door Held Open
- Zone Accessed by User

Guard Tour Report

Matrix Comsec Pvt. Ltd.
Guard Tours

Run by: **System Admin**   Date: **02/10/2013**   **10:55**

ID	Guard Tour Name	User ID	User Name	Start Time	Tour Duration	Cycle Time	Sequenced
1	Factory Gaurd	883	HEMANT KUMAR	00:00	06:00	00:30	No
	Door Controller:	**ID**	**Name**	**Device Type**			
		6	Factory Admin	Panel Door			
2	Factory Gaurd	884	AJAY KUMAR SAHU	00:00	06:00	00:30	No
	Door Controller:	**ID**	**Name**	**Device Type**			
		6	Factory Admin	Panel Door			
3	Factory Gaurd	897	AJAY SINGH	00:00	06:00	00:30	No
	Door Controller:	**ID**	**Name**	**Device Type**			
		6	Factory Admin	Panel Door			

Zone Accessed by User

Matrix Comsec Pvt. Ltd.						**Page 1 of 1**
Zones Accessed by User from 01/07/2013 to 31/07/2013						
Run by: System Admin			Date:	07/10/2013		17:30
Sr No	**User ID**	**Name**	**Date**	**In**	**Out**	**Duration**
HO Panel Lite						
Zone-1						
1	1009	Dipti Rathwa	02/07/2013	09:25		
2	1009	Dipti Rathwa	02/07/2013	13:40		
3	1009	Dipti Rathwa	03/07/2013	09:17		
4	1009	Dipti Rathwa	03/07/2013	14:02		
5	1009	Dipti Rathwa	04/07/2013	09:22		
6	1009	Dipti Rathwa	04/07/2013	09:39		
7	1009	Dipti Rathwa	04/07/2013	16:11		
8	1009	Dipti Rathwa	16/07/2013	09:45		
9	1009	Dipti Rathwa	16/07/2013	13:39		
10	1009	Dipti Rathwa	16/07/2013	15:36		
11	1009	Dipti Rathwa	16/07/2013	15:58		
12	1009	Dipti Rathwa	17/07/2013	09:33		
13	1009	Dipti Rathwa	17/07/2013	13:28		
14	1009	Dipti Rathwa	18/07/2013	14:00		
15	1009	Dipti Rathwa	19/07/2013	09:30		
16	1009	Dipti Rathwa	19/07/2013	13:31		
17	1009	Dipti Rathwa	20/07/2013	09:22		

Door Held Open

Matrix Comsec Pvt. Ltd. Page 1 of 1
Door Held Open List from 01/10/2013 to 20/10/2013

Run by: System Admin   Date: 20/10/2013   11:14

Sr. No.	Date Time	Clear Date Time	Door Controller	Duration
1	4/10/2013 18:06:37 PM	4/10/2013 18:07:11 PM	dead man door	0 days 00:00:34
2	4/10/2013 18:10:47 PM	4/10/2013 18:11:06 PM	dead man door	0 days 00:00:19
3	4/10/2013 18:35:25 PM	4/10/2013 18:35:34 PM	dead man door	0 days 00:00:09
4	4/10/2013 18:35:44 PM	4/10/2013 18:35:49 PM	dead man door	0 days 00:00:05
5	4/10/2013 18:35:59 PM	4/10/2013 18:36:03 PM	dead man door	0 days 00:00:04
6	4/10/2013 18:36:13 PM	4/10/2013 18:36:21 PM	dead man door	0 days 00:00:08
7	4/10/2013 18:36:48 PM	4/10/2013 18:36:50 PM	dead man door	0 days 00:00:02
8	4/10/2013 18:37:10 PM	4/10/2013 18:38:31 PM	dead man door	0 days 00:01:21
9	6/10/2013 19:05:00 PM	6/10/2013 19:05:05 PM	dead man door	0 days 00:00:05
10	6/10/2013 19:48:43 PM	6/10/2013 19:49:18 PM	dead man door	0 days 00:00:35
11	6/10/2013 19:56:08 PM	6/10/2013 19:56:17 PM	dead man door	0 days 00:00:09
12	6/10/2013 19:56:27 PM	6/10/2013 19:56:34 PM	dead man door	0 days 00:00:09
13	6/10/2013 19:56:44 PM	6/10/2013 19:56:49 PM	dead man door	0 days 00:00:05
14	6/10/2013 19:00:44 PM	6/10/2013 19:01:06 PM	dead man door	0 days 00:00:22

I/O Linking Report

Matrix Comsec Pvt. Ltd.								**Page 1 of 1**
		I/O Linking [Panels]						
Run by: System Admin						Date: 15/10/2013		17:38
Sr No	**ID**	**Name**	**Input Group**	**Output Group**	**Time Zone1**	**Time Zone2**	**Time Zone3**	**Status**
HO Panel Lite								
1	1	Aux Linking	Aux Input Group	DC Aux Ports	Time Zone 1			InActive
2	2	Force Open link	Door Force Open	Panel Output				InActive
3	3	Fire-Unlock	Fire Alarm	Door Unlock				InActive
4	4	Reception	Reception	Door Unlock	Time Zone 1			Active
5	5	Reception New	Reception New	Door Unlock	Time Zone 1			Active
Factory Panel								
1	1	Aux Linking	Aux Input Group	DC Aux Ports				InActive
2	2	Force Open link	Door Force Open	Panel Output				InActive
3	3	Fire-Unlock	Fire Alarm	Door Unlock				InActive

Feature List

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Access Control

2-Person Rule

Blocked User

First-in User Rule

Do Not Disturb (DND)*

Occupancy Control

Guard Tour*

Fire Alarm Integration

Smart Identification

Access Mode

Card Only

Finger Only

Card + Finger

Card + PIN

Finger + PIN

Card + Finger + PIN

Card or Finger or PIN

Verification 1:1 or 1: N

Bypass Finger

Zone-wise Card, Finger, PIN

Access Policies

Home Zone*

Visit Zone*

Access Levels*

Physical Zones

Short Duration

Time Zones*

User Groups

VIP Access

Dead-Man Zone*

Feature list

Anti-Pass Back
Hard/Soft
Local/Global
Forgiveness

Door Management
Door Auto Relock
Man-Trap (Door Interlock)*

Input-Output Ports
Control
Linking*
Status

Alarm
Door Communication
Door Controller Tamper
Door Fault
Door Forced Open
Door Held Open
Door Lock Tamper
Duress Detection
External Reader Tamper
Network Fault
Zone Monitor (Dead-Man)*
Monitor, Acknowledge and Clear

*These features are available with COSEC PANEL LITE

Feature List

SMS and Email Alerts for
Customized Message
Missing In/Out
Monthly Attendance
Leave/Tour Application
Leave/Tour Approval
Leave/Tour Rejection
User Events-Entry/Exit
Present/Absent

Blocked Users
Absentee
Unauthorized Attempts
Usage Count

NUTECH SOLUTIONS

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Thank You

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