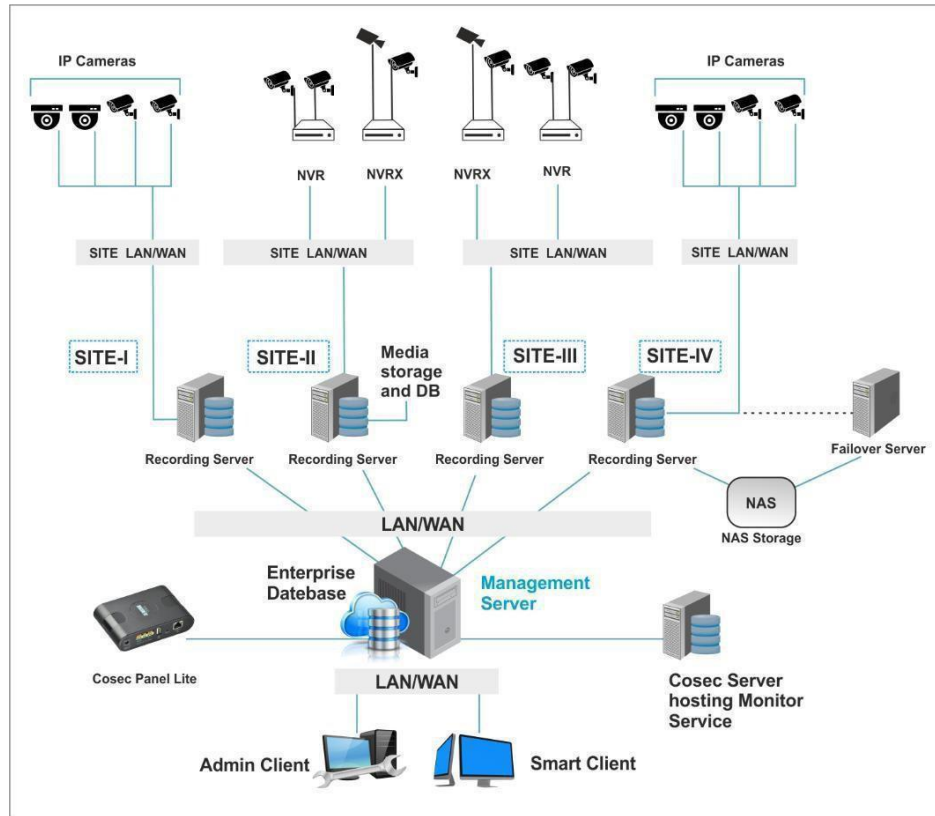
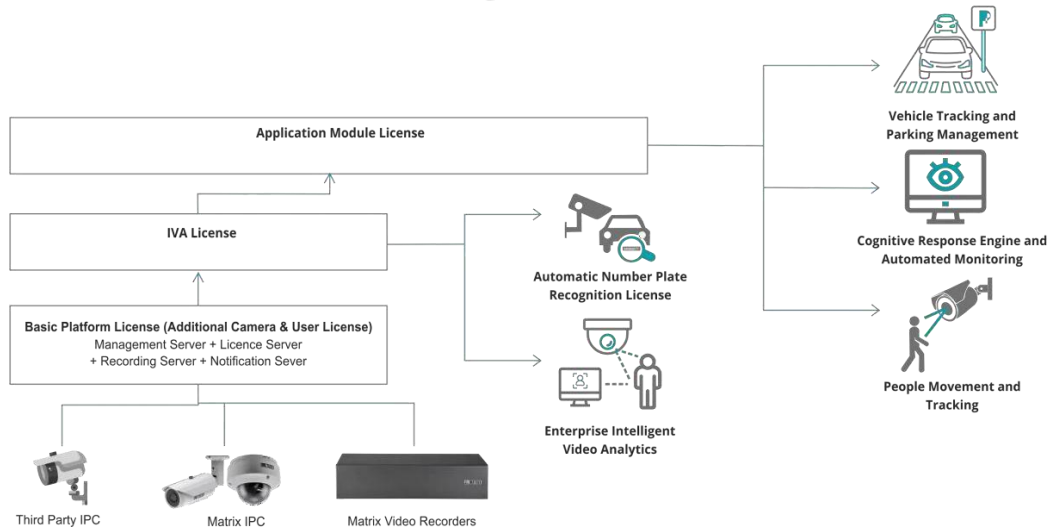


Product Architecture and Components



Licensing Structure



Platform License	IVA License (Cam1, Cam3, Cam10)	Application Module License	Extra License	Software Upgradation License
SAMAS Platform (FOC: Weighbridge Application, COSEC Integration, Multi-display, Investigator with VCA, CREAM Basic Scenario)	Enterprise IVA (EIVA) (Motion Detection, Tripwire, No Motion Detection, Camera Tampering, etc.)	Vehicle Tracking & Parking Management (VTPM) (Slot- 10/50/200)	Camera License (Channel 5/20/100)	Annual Up gradation Package (based on Total No. of Camera)
	Automatic Number Plate Recognition IVA (ANPR)	Cognitive Monitoring, Analysis & Response Engine (CREAM))	User License for Smart Client/ Mobile Application	

- No Extra license is needed to set up the Recording Server, Redundant Recording Server, or Failover Recording Server.
- No Extra license for setting up the Transcoding Server, Transcoding the stream parameters.
- No Extra license for setting up the ONVIF RTSP Server or Sharing the required streams with Third-party requesting clients.

PRODUCT PREREQUISITES

1. Microsoft.NET Framework 4.5 & Above
2. Windows Installer 3.1
3. Microsoft Visual C++ 2015 - 2019 Redistributable - vc_redist_x64.exe
4. Microsoft SQL Server 2008 R2 SP2 (For DBMS) up-to 2016 Version - Express Edition for Less than 10 GB (Freeware), Windows 11 SQL Express 2019
5. MSSQL Server Standard Edition/ Enterprise Edition - License Version (2017 Bic. Guide)
 - a) CAL License - Require No. Of CAL License equal to No. Of Components connected with DB
 - b) CORE License - Equal to the Cores of the Server in Which DB is installed.
6. Crystal Report Runtime x64 13.0.20.2399 or Above (For Reports)
7. Microsoft Access Database Engine 2010 Redistributable (64-bit) or higher (For Importing Multi-Language File)

PRODUCT OFFERINGS

Functionality	SATATYA SAMAS Platform
Default No. of the Camera License (FOC with SATATYA SAMAS PLT)	5
Maximum No. of the Cameras for Solution (Supported)	65535
Maximum No. of the Cameras Per Recording Server (Supported)	400
Default No. of Concurrent Users (FOC with SATATYA SAMAS PLT)	1
Maximum No. of the Concurrent Users (Supported)	65535
No. of MATRIX Video Recorders per server (Supported)	IPC Channel Based
Maximum No. of Recording Server (Supported)	65535
IVA Functions (FOC with SATATYA SAMAS PLT)	EIVA1 (Enterprise IVA 1 Channel)
	VTPM5 (Parking Management 5 Slot(s))
	CREAM1 (1 Advance Scenario)
	1 ANPR (LPR for 1 Ch)
COSEC Access Control Integration (FOC with SATATYA SAMAS PLT)	Yes
Data-Base Utility (FOC with SATATYA SAMAS PLT)	Yes
Smart Client (One User FOC with SATATYA SAMAS PLT)	Yes
SAMAS Media Player (FOC with SATATYA SAMAS PLT)	Yes
BACnet Integration	Yes
Custom Audio Alert for Events	Format - .wav; Size: 2Kb - 10Mb; No. of Audio: 1000

Module Wise Functionality Covered

SAMAS Platform	SAMAS License
	Centralized/ Distributed Management & Recording Components
Deployment Architecture	• Management Server • Recording Server • Fail-over Server • IVA Server • Notification Server • License Server • Transcoding Server • ONVIF Server
Centralized Management & Control	Yes
Operating System Platform	Microsoft Windows
DBMS Support	MS-SQL
Video Wall/ Multi-Display	Yes
ONVIF Support	Yes, Profile S and G
Internet Protocol Supported	IPv4; IPv6
Mobile App without Cost	Yes (SATATYA VISION, Android and IOS)
Push Notification for Event & Action	Yes (Notifications on Mobile)
Push Video	Stream video from VISION (Phone) to SAMAS (VMS)
Multiuser Login	Allowed
Login Via SSL - Secured Socket Layer Login	Yes
Retrieval of Password through OTP (SMS/ E-mail)	Yes
E-mail & SMS, and Whatsapp Templates for Events & Action	Yes (Default and Custom)
Creating Custom/User-defined Events/ Alerts	Yes
Calling Custom Events through TCP and HTTP API	Yes(Trigger)
Integrating COSEC & Custom Database	Yes (For User & Vehicle Details)
Activity/ Events Logs	Yes, with Custom Search Criteria, and Event Subscription
License Management Configuration	Yes
Device-based License Dongle Support	Yes(Dongle 200, Device Supported: COSEC VEGA PANEL LITE V2)
Virtual License Support (VLM)	Yes
Vehicle & User Attributes	Yes (Add/ Edit/ Delete)
Failover Recording Server Without Additional Cost	Yes
Redundant Recording Server without additional License	Yes
ONVIF RTSP Server without additional License	Yes
Transcoding Server without additional License	Yes

Server & Entity Connection with Dual ISP (Failover ISP Support)	Yes - Provision to Provide Different Three IPs - Local Network IP - Primary ISP - Secondary ISP Applicable to Management Server, Recording Server, Failover Server, IVA Server & Devices.
Fail-Over Server Support & Recording	Yes - Local Drive Support - Device/Entity wise redundancy - Playback Support
Recording Server Configuration	Yes - Activate Server - Set up Storage, Recording & Backup Assigning & Configuring the Devices (Recorders & IPC) to Server (Auto Discovery & Manually) Location & Contact Information
Configuring Camera & Device	Yes - Profile Setting - Stream Parameters & Stream Usage - Recording & Backup - Events Basic Settings (OSD; Image Appearance)
Video Compression Format	H.265/H.264/ MPEG-4/ MJPEG
Storage	Yes - Local Drives - Network Added Storage (NAS) - FTP Drive
Recording Type	Yes - Continuous Recording - Manual Recording - Motion Recording - Event Recording
Adaptive Recording	Yes
Device/ Edge Initiated Communication	Yes
Backup & Archiving	Primary Backup with Two Level Archiving Provision
Storage & Bandwidth Optimization	Yes
Day Highlight & Clip Capture	Yes
Configuration Cloning	Yes
System & Device Time Synchronization	Yes (Over ONVIF)
Camera Grouping	Yes
PTZ Positions & Tour Configuration	Yes
On-Screen PTZ Controller	Yes
Hardware PTZ Controller Support	Yes (USB)
Multiple IPC Export over Synchronous and Asynchronous Mode	Yes

Video Export Format	Native (Proprietary Format)/ AVI
Watermarking on Export	Yes(Image/ Video)
Detection through Investigator	Yes (Based on the IVA License)
E-Map/ Sitemap	Yes • Add Electronic Map (.jpg / .bmp Format) • Multilevel • Place the Entity with a different appearance • Configure Event Notification
E-map through Live View Video Tile	Yes
System Monitoring & Health Chart	Yes (Server/ Devices/ IPC) • Connected/ Not Connected Entity • Stream Receiving • CPU Usage/ Memory Usage/ Server Availability • Storage Usage and Projection • Recording Rate • Last and Latest Recording Files Availability
User Logical View Tree - For Online Users	Yes
Provision to mark Device Under Maintenance	Yes, with Mandatory Reason
COSEC Access Control Integration	Yes - No restriction
Standalone Panel Support	Yes
I/O Integration with Sensors	Yes
System Setting	Yes • Event/ Alarm/ Notification Log management • IP Filter (Max. 99 IP Range) • Active Directory Support
Multi-language Support	Yes • User Interface Level - Labels • Reports & Templates • Input
System Account User	Accessibility-wise User Rights (Add/ Edit/ Remove) • Administrator • Operator • User
File Templates	• File Import/ Export • Schedules • Priority wise Alarms & Custom Alarms
API Integration for Third-party POS	Yes
Four Simultaneous Stream support	Yes - Live/ Local/ Recording/ Mobile
Multicast Stream Support	Yes(Recording Server, Smart Client, IVA Server Third P Client)
64 Camera Video Template with different Matrix	Yes
Personalize My View for Live View & Page Sequence	Yes
Dwell Time Configuration for IP camera	Yes - 1 to 60 S Individual IP camera level configuration

Client Bandwidth Optimization	Yes - Using Bandwidth available - Yes (Transcoding) - As per the Video tile occupied on Screen - Yes (Layout wise)
Event Log/ Activity Log & Export	Yes
TwoWay Audio	Yes
Audio Broadcasting	Yes
Third-party Client – Stream Share	Yes Live View and Playback Data using RTSP Streaming Server
One Click IPC & Monitor Control on Client	Yes
Alarm Management	Yes– Generation/ Acknowledgement / Comment/ Close
OperatorGenerated Event/ Manual Event/ Trigger IVA	Yes
Bookmarkfacility with Lock	Yes
Edge Recording	Yes
Edge Storage Retrieval & Playback sync	Yes (Connection/ Schedule retrieval of Records)
Video Pop up/ Email/ SMS/ Whatsapp Snapshots Live Notification	Yes
Reports with Multi-language Support	Yes
UI Personalization	Yes - Custom Logo on Client Screen & Video Export
Report Personalization	Yes - Custom Logo & Font Size
Advance Report with Report Scheduler	Yes
Report with Video Clip Hyperlink - Thumbnail & Images	Yes
Number of camera connections per Recording server	400
Recording and monitoring performance	400ch@ 2Mbps
Video Input bandwidth per Recording Server	870Mbps
Video Output bandwidth per Recording server	2350Mbps
BACnet Integration	Yes
Adaptable Layout based on Camera Group	Yes
Custom Audio Alert for Events	Yes- Format:.wav; Size: 2Kb- 10Mb; Number of Audio: 1000
OWASP Desktop top 10	Yes
STQC Certified	Yes
PRODUCT ADD ON	
COGNITIVE RESPONSE ENGINE WITH AUTOMATED MONITORING (CREAM)	Advance Scenario-based Event and Action Configuration License
Basic Scenario Without Cost	Single Event & Multiple Action Configuration

Advance Scenario	Multiple Actions against Multiple and Combinational Events Configuration Sources from All the Connected Modules & Entity • Wait (Delay) as an Action • Configure Action against Failed Scenario • Logical Grouping of Event & Action • Scenario Initiated • Scenario Waiting • Scenario Resumed • Scenario Failed
Schedule Execution	Yes
Detect on Event	Yes
Event Source	• Management Server • Manual Trigger • Recording Server • Device • Sensor • Alarm
EventSource	• IVA Server • Fail-Over Server • Access Control Device • Scenario • Perimeter Management Entity • Crowd Premise • Emergency Event • Parking Management Entity

Action Choices	• Capture Image • Import File • Generate File • Open Door (COSEC Device) • Live View on Event • Send SMS • Record Event • Set PTZ Position • Send E-mail • Trigger COSEC - AUX Output • Trigger Alarm • Trigger IVA Detection • Trigger Device – AUX Output • Wait (Introduce Delay)
Reports	Yes • Evidence Reports with – Events, Parameters, Image Detailing
PERIMETER MANAGEMENT	EIVA – Channel-based license
PERIMETER MANAGEMENT - IVA Module (EIVA)	Yes • Intrusion Zone – Directional Intrusion Detection Event • Security Line – Tripwire and Tailgating Event • Perimeter Zone – Motion/ No Motion/ Camera Tampering/ Missing Object/ Loitering Events
VEHICLE TRACKING & PARKING MANAGEMENT	VTPM- Parking Slot based License
Parking Management	Multilevel Hierarchical Parking Solution • Parking Slot/ Slot group/ Lane/ Area/ Facility – I.e. (Facility (Area (Lane (Slot Group (Slot))))
Vehicle Occupancy	• Object Size based Occupancy • LPR-based Occupancy • Parking Occupancy Sensor*

Vehicle Security Controls	Yes - Integration with Access Control Device and Database - Vehicle White list/ Blacklist/ Authorized/Not Authorized/ Allowed/ Not Allowed Functionality - Auto Authorization of Vehicle User Restriction
Parking Management Events	- Unauthorized Parking - Prohibited Parking - Improper Parking - Slot Occupancy - Vehicle Overstay Parking After Closing Service Driveways - Wrong Way Detection
Parking Premises & Grouping	Vehicle Counts (In/Out) Premise Availability
Slot Attributes & Entities	Yes (Add/ Edit/ Delete)
Parking Management - Directional Signboards/ Counter &	Yes- Media Client & Multi-display Dashboard
Reports	- Prohibited Parking - Vehicle Counting - Wrong Way Parking - Slot Occupancy - Unauthorized Parking - Most Occupied Parking - Improper Parking - Least Occupied Parking - Most Visited Parking - Vehicle Overstay - Parking After Closing
CROWD MANAGEMENT	PMTC– Channel-based License
Crowd Movement (Crowd Premise & Grouping)	Yes People Counting (In/ Out) Premise Availability
Edge People Counting	Supported through MATRIX IPC –Motorized Varifocal Variant(s)
Live Event Counter	Yes
Reports	People Counting Reports with Computational Parameters- Tabular/ Graphical (Line/Bar/Column) Reports with PDF and Excel File Format
VEHICLE MANAGEMENT- ANPR	ANPR – Channel-based License
License Plate Detection & Recognition/ Automatic Number Plate Recognition	Yes
Vehicle Blacklist & White list	Yes through COSEC/ Custom Database

Supported Country List for ANPR	• Albania • Algeria • Argentina • Australia • Austria • Azerbaijan • Belgium • Bolivia • Bosnia • Herzegovina • Botswana • Brazil • Bulgaria • Cambodia • Cameroon • Canada • Cape Verde • Chile • Colombia • Costa Rica • Croatia • Cuba • Cyprus • Czech Republic • Denmark • East Timor • Ecuador • El Salvador	• France • Georgia • Germany • Ghana • Greece • Guatemala • Honduras • Hungary • Iceland • India • Indonesia • Ireland • Israel • Italy • Jordan • Kazakhstan • Kenya • Latvia • Lebanon • Lithuania • Luxembourg • Malaysia • Myanmar • Namibia • Netherlands • Norway • Paraguay • Peru	• Poland • Portugal • Puerto Rico • Republic of the Congo • Romania • Russia • Singapore • Slovakia • Slovenia • South Africa • Spain • Sri Lanka • Sweden • Switzerland • Turkey • United Kingdom • Ukraine • Uruguay • Uzbekistan • Venezuela • Vietnam • Palestinian National Authority • Finland • Estonia
Reports	Yes • Vehicle Detection • Vehicle Identified • Vehicle Unidentified • Blacklisted Vehicle Identified • White listed Vehicle Identified • Suspected Vehicle Identified		

Specifications are subject to change without prior notice



ABOUT MATRIX

Established in 1991, Matrix is a leader in security and telecom solutions for modern businesses and enterprises. Matrix, an innovative, technology driven and customer focused organization, is committed to keep pace with the revolutions in security and telecom industries. With more than 40% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products such as Unified Communications, IP-PBX, Universal Gateways, Convergence, VOIP Gateways, GSM Gateways, IP Video Surveillance, Access Control and Time-Attendance. These solutions are feature-rich, reliable and conform to the international standards. Having global footprints in Europe, North America, South America, Africa and Asia through an extensive network of more than 4000 channel partners, Matrix ensures that the products serve the needs of its customers faster and longer. Matrix has gained trust and admiration of customers representing the entire spectrum of industries. Matrix has won many national and international awards for its innovative products.



MATRIX COMSEC

Head Office

394-GIDC, Makarpura,
Vadodara – 390 010, India.

Ph: +91 265 613 7222

E-mail: Inquiry@MatrixComSec.com

Factory

19 – GIDC, Waghodia,
Dist. Vadodara – 391 760, India.

Ph: +91 265 613 7222

MATRIX COMSEC – North America

2 Wickstead Crt,
Brampton,
Ontario, L6R 1N8.

Ph: (+1) 408-643-0581 (USA)

Ph: (+1) 437-266-1005 (Canada)

www.MatrixComSec.com