MATRIX SATATYA

Video Surveillance Solutions for Enterprises

Organizations are responsible for ensuring safety of their employees and security of the assets. Further, productivity and compliance are also strongly linked to video surveillance infrastructure. No wonder, video surveillance has emerged as a critical part of any organization's security strategy and infrastructure.

Presenting Matrix SATATYA – a family of Video Surveillance solutions specifically engineered for serious deployments. Matrix SATATYA offers all standard video surveillance functions including video capturing, recording, streaming, live monitoring, playback and investigation. Additionally, SATATYA offers centralization, video analytics and value added applications such as Command & Control, Parking Management and Weighbridge, and POS Integration. It's innovative Cognitive Response Engine allows customers to automate their routine surveillance activities. Matrix SATATYA family includes enterprise-grade Video Management System (VMS), Network Video Recorders (NVRs) and IP Cameras.
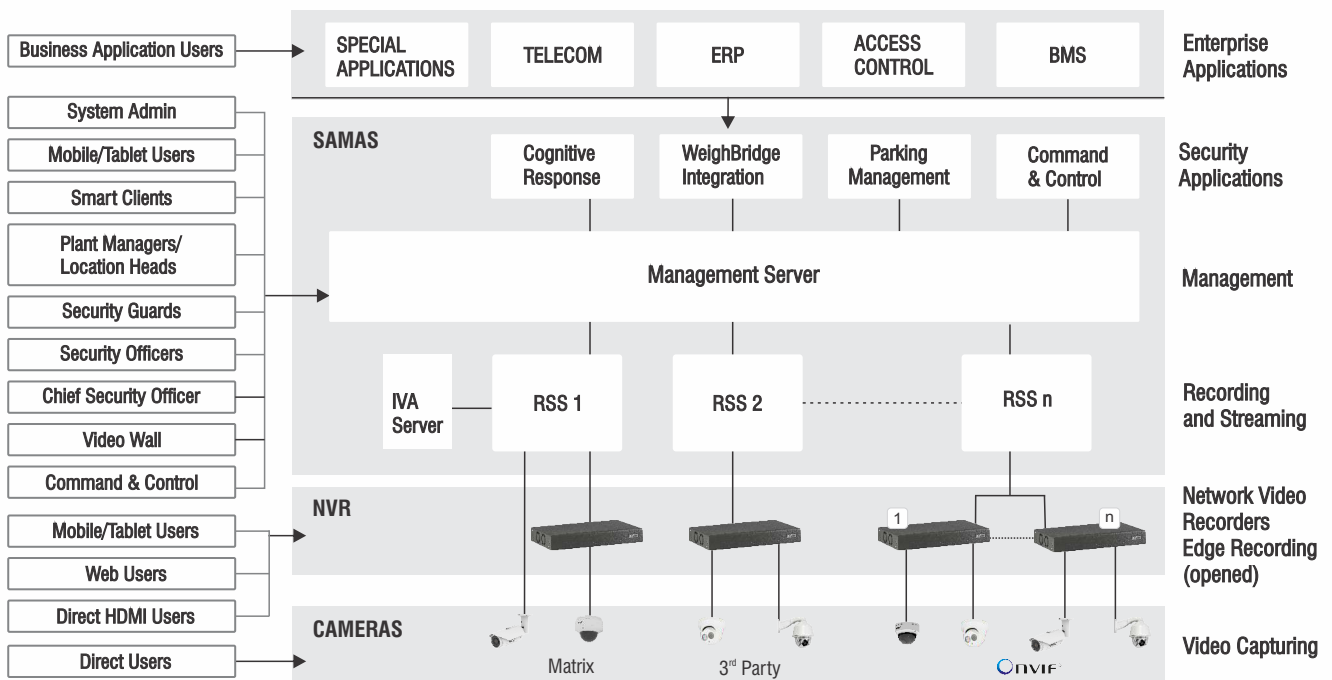
Designed with emphasis on centralized visibility and preventive security, Matrix SATATYA truly addresses security, safety, productivity and compliance needs of modern organizations.

MATRIX
SECURITY SOLUTIONS

SATATYA INTRODUCTION

Matrix SATATYA is a family of enterprise-grade video surveillance products including IP Cameras, NVRs, Video Management System and Surveillance Applications. SATATYA offers following functions:

- Video Capturing
- Video Live View
- Video Recording
- Video Streaming
- Playback and Investigation
- Multi-Location and Centralization
- Command and Control
- Intelligent Video Analytics (IVA)

- Notifications and Alarms
- Storage and Backup
- System Admin, Devices and Users Management
- Integration with Third-Party Systems
  (Access Control, Fire Alarm, Intrusion System, Toll Booth, BMS, ERP, etc.)
- Integration with Apparatus (Locks, Turnstiles, Flap/Boom Barriers, Bollards, etc.)
- Parking Management
- Weighbridge Integration
- Cognitive Response Engine

SATATYA ARCHITECTURE

SATATYA DIFFERENTIATORS

Centralized Video Surveillance
Instead of typical ad hoc bits-and-pieces, SATATYA promotes top-down, central planning, designing, implementation and operation of video surveillance. Centralized system management ensures faster response to changing user needs, user access rights, robust data and backup management.

Organization-wide Visibility and Control
Consolidated live view and events from multiple locations spread across the planet ensure real-time visibility and quick response. Consistent implementation of security policies reduces incidents, improves safety-security, compliance and productivity.

Complete Portfolio
Matrix SATATYA family includes entire range of products including IP Cameras, NVRs, VMS, PC Smart Clients and Mobile Apps ensuring symbiotic interworking, seamless integration, lower procurement cost and single point for support.

Scalable
With expandability up to 65,535 cameras, 10,000 locations and

unlimited users, SATATYA is designed for modern organizations.

Distributed and Modular
Matrix SATATYA can adapt to any organization structure, hierarchy and physical layouts with complete flexibility and investment protection.

Cutting-edge Technologies
SATATYA employs latest technologies such as EXMOR, H.265, 4K and RAID for better performance and making it future ready.

Software-centric
SAMAS Video Management System is at the center of most SATATYA deployments. This software-centricity brings intelligence, flexibility, automation, efficiency and scalability.

Performance
SATATYA scores high on all performance attributes expected from a video surveillance system. Be it video quality, streams, throughput, bandwidth, storage, ease of use, reliability, durability, etc.

Robust
Multi-level recording with auto sync ensures video data is available when required. Most SATATYA building blocks are validated on "test to fail" philosophy with baseline and scalability tests. Further, anomaly and fault detection help predict and prevent failures.

Redundancy
Mission critical video surveillance applications demand redundancy and safe failover. SATATYA is designed with these requirements at all levels - cameras, NVRs, RSS and management servers.

Integration
Integration of video surveillance with key business applications and processes such as POS, Access Control, BMS, Fire, Weighbridge and ERP assist in automating business processes for higher productivity and control.

Open System
SATATYA offers open interfaces at all levels - camera, NVR, VMS and surveillance applications. Open interfaces include physical interfaces, open protocols such as ONVIF, APIs and Database Integration.

Platforms
SATATYA is platform agnostic and supports diverse devices and clients, including video walls, TV screens, PC/laptops and mobiles.

Innovative Functions
SATATYA goes beyond the standard "capture-view-store-play" video surveillance solution. It offers a host of value-added applications such as Command & Control, Video Wall, Parking Management, Weighbridge, Cognitive Response Engine, Face Recognition, ANPR, People Counting, Powerful Investigator, Advanced Intelligent Video Analytics, etc.

Unique Features
SATATYA offers a host of innovative features offering flexibility, productivity, ease of use and cost benefits.

Video Analytics
All building blocks of SATATYA are strong on analytics, starting with cameras offering analytics on the edge. NVRs offer second layer of analytics. Finally, RSS (Recording and Streaming Server) works with Matrix IVA Server or third-party IVA servers. With the capability to run analytics on live and playback, video analytics offers benefits of automation and preventive security.

Cognitive Response Engine
Cognitive Response Engine with Automated Monitoring (CREAM) is an innovative SATATYA module designed to automate routine surveillance workflow and activities. User can create multiple customized scenarios with input, triggers, real-time analysis and desired responses. CREAM ensures preventive security with consistent response by overcoming human constraints, lapses and delays.
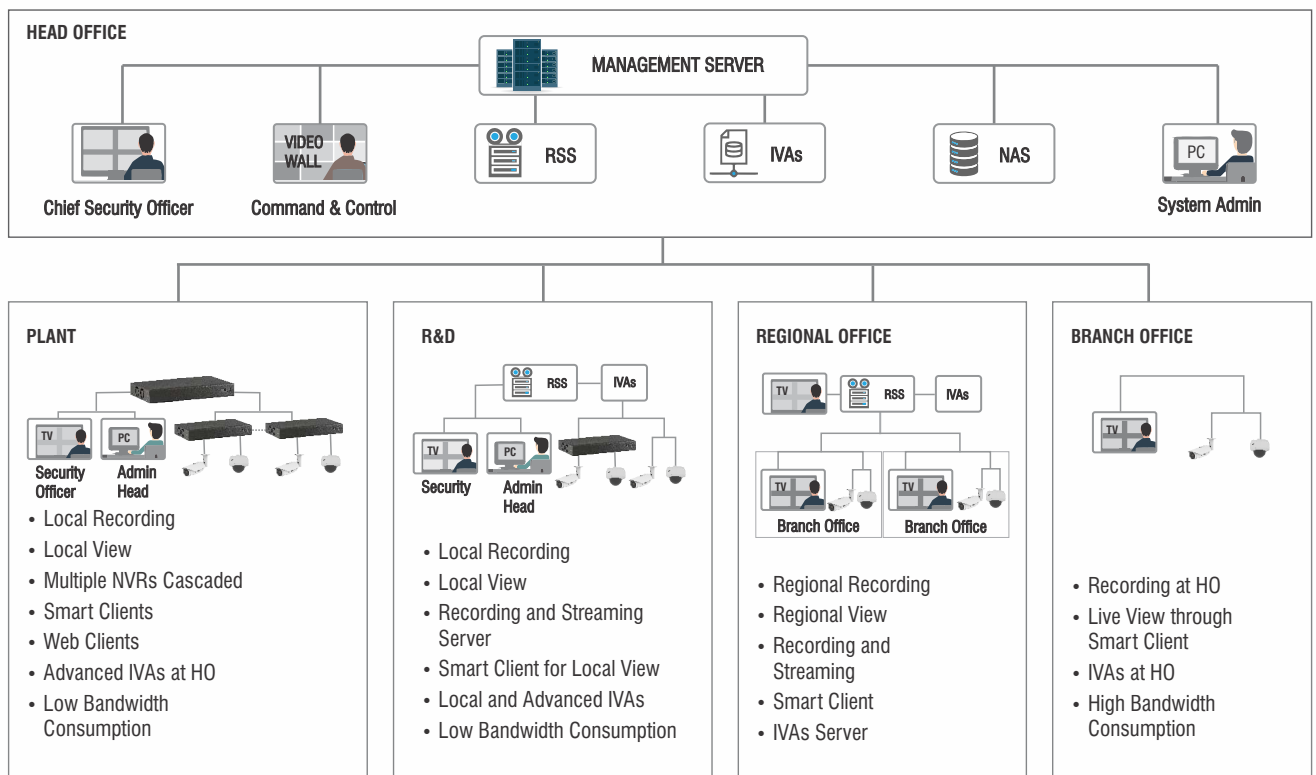
Simple Operations
SATATYA is simple to manage and run without need for technical or security experts.

Support
With indigenous R&D, network of 2,500+ SIs and 24x7x365 support, Matrix is equipped to offer prompt support and product upgrades ensuring higher uptime.

SATATYA DEPLOYMENT

HEAD OFFICE

MANAGEMENT SERVER

Chief Security Officer | Command & Control | RSS | IVAs | NAS | System Admin

PLANT

Security Officer | Admin Head
- Local Recording
- Local View
- Multiple NVRs Cascaded
- Smart Clients
- Web Clients
- Advanced IVAs at HO
- Low Bandwidth Consumption

R&D

RSS | IVAs

Security | Admin Head
- Local Recording
- Local View
- Recording and Streaming Server
- Smart Client for Local View
- Local and Advanced IVAs
- Low Bandwidth Consumption

REGIONAL OFFICE

RSS | IVAs

Branch Office | Branch Office
- Regional Recording
- Regional View
- Recording and Streaming
- Smart Client
- IVAs Server

BRANCH OFFICE

- Recording at HO
- Live View through Smart Client
- IVAs at HO
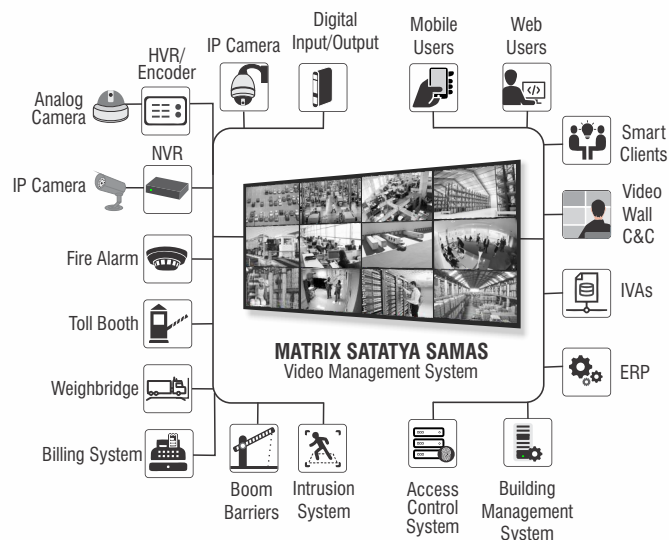- High Bandwidth Consumption

SATATYA SAMAS - VIDEO MANAGEMENT SOFTWARE

Video surveillance technology is rapidly evolving from the yesteryears' hardware centric isolated products to software powered centralized solutions. Matrix SAMAS is a comprehensive video management software system created to play the central role in a surveillance system for modern organizations. With its modular and scalable architecture, Matrix SAMAS can be effectively deployed in any organization irrespective of its structure, size or geographical spread. Further, SAMAS offers unique value-added surveillance applications such as Parking Management, Weighbridge, Cognitive Response Engine with Automated Monitoring and Access Control Integration. Video Analytics is a core strength of SAMAS with built-in standard and advanced IVAs and support for third party IVAs. Thanks to the open platform and APIs, SAMAS can be integrated with a host of third party applications and devices including IVA Servers, BMS, Fire, ERP and devices.

SAMAS caters to all classes of users including Chief Security Officer (CSO), Command & Control, Plant Heads, Branch Managers, Remotely Travelling Managers, Security Guards, IT Managers, System Admin, etc.

Matrix SAMAS adds the power, flexibility and intelligence of software to any video surveillance system. SAMAS is ideal for large and medium sized organizations.

SAMAS SERVER AND CLIENT MODULES

Management Server
Manages the entire system, authenticates users and administers RSS, NVRs, cameras, devices and peripherals. Management Server runs on Windows and SQL.

Recording and Streaming Server (RSS)
Receives video streams from cameras and NVRs for recording on local drives and NAS, and streaming to users for live viewing. RSS also manages backups and archiving, and runs on Windows.

Admin Client
Admin Client is a Windows application to log into the SAMAS Management Server for configuring and managing users, servers, devices, storage, backup, alerts and notifications. Multiple admin clients can be created with different rights.

Smart Client
Smart Client is a video surveillance user application designed for Windows to perform all activities such as Live View, Playback, Investigation, Events, Alerts, Pop-ups, Reports, Video Analytics, System Monitoring, etc. Multiple such Smart Clients can be created with different rights.

Media Client
A Windows application for transient users not having regular log in rights but still needing access to videos for investigation. A Media Client points to drives where recorded/historical videos are stored.

Mobile Client (VISION)
Mobile Client is a mobile application for Android and iOS mobile users for Live View and Playback. Multiple Mobile Clients can be created with different rights.

SAMAS DIFFERENTIATORS

Distributed and Federal Architecture
Matrix SAMAS can be deployed at multiple locations to match any organization structure, hierarchy and geographic layouts.

Scalable
With expandability up to 65,535 cameras, 10,000 locations and unlimited users, SAMAS can meet requirements of any large organization.

Cloud Ready
SAMAS can be hosted on a private or public cloud.

Command & Control
SAMAS supports functions and features to facilitate C&C operations such as video walls, hierarchical eMaps, bookmarks, evidence locks, video pop-ups, audio-visual alarms, instant playbacks, etc.

Multi-monitors and Video Wall
Organizations can setup multiple TVs and video walls for central, regional and local monitoring stations. SAMAS also offers flexible logical grouping and sequencing of cameras.

High Availability
SAMAS offers flexibility to deploy failover servers and redundant cameras for critical locations, truly making it a highly available surveillance system.

Server Redundancy
Deploy multiple RSS for uninterrupted monitoring and preventing data loss.

Network Redundancy
Cameras initiate communication with RSS and NVRs, eliminating dependency on networks. Further, configure multiple ISPs and networks for uninterrupted connectivity during ISP or network failures.

Health Status
SAMAS monitors and enunciates health status of servers, NVRs, cameras, storage and sensors.

Multiple Stream Profiles
Optimize bandwidth requirement by configuring different profiles for different usages such as recording, local and mobile view, etc.

User Roles and Rights
Create and assign users' rights matching their profiles for privacy and security. Control their camera-wise live view and playback rights.

Multilingual
SAMAS supports all languages including English, Spanish, French, Portuguese, Italian, German, Korean, etc. Further, Matrix or SI can add a new language easily.

Global Search
SAMAS intelligently searches and fetches footage and events for any date-time, interval, source from all possible global sources such as RSS, NVR and camera, backup and archive.

Powerful Investigator
SAMAS offers very powerful yet simple to use investigator. It investigates recorded videos by applying selected video analytics to save investigators' valuable time and efforts.

Evidence Lock
Restrict deletion or overwriting of important video evidence by defining a locking period.

Event Triggered Evidence Posting
RSS collects event triggered evidence clip from the edge device and sends to the designated Smart Client ensuring real-time response and protecting the evidence even if the edge device is destroyed.

Manual and Auto Clip Export
Export or mail video clips in any popular format either manually or automatically when triggered by events.

User Defined and Triggered Events
User can define his own events and trigger them leading to predefined responses such as sending a clip, operating a device, generating an alarm or a trigger to CREAM.

Day Highlight
SAMAS creates a summary file based on events or time.

Time Lapse
RSS creates time lapse files by reducing frames from the video feeds for quick overview.

Retrieve Edge Data
RSS would retrieve recording from the edge device missed during network brownouts.

Adaptive Edge Streaming
SAMAS instructs Matrix NVR and cameras to adjust FPS based on events to overcome bandwidth and storage constraints.

Hierarchical eMap
Assign and monitor cameras, sensors, NVRs, RSS, Matrix Access Control devices to locations on maps of buildings, campuses, cities, etc. Use eMap to check video feeds, health status and alarms.

Popular and ONVIF Camera Support
SAMAS works with all popular brands and cameras supporting ONVIF.

Reports and Analysis
Reports and event logs for in-depth analysis and MIS.

Notifications
SAMAS offers multiple options for notifications such as Video Pop-up, Email with Snapshot, Audio Alarm-Buzzer and SMS.

Device Initiation
SAMAS connects with all Matrix NVRs and cameras without the need for a static or dynamic public IP overcoming issues with availability of public IP addresses.

Camera-wise Recording and Backup Days
Define separate retention days for recording and backup for every camera.

Two-level Archiving
First level archiving creates exact copy of the original data. Second level archiving allows removing P frames and audio to optimize storage.

Two-way Audio
Use Smart Client audio-in and audio-out ports to connect mic and speaker and listen live and talk or make announcements.

SAMAS CREAM - COGNITIVE RESPONSE ENGINE WITH AUTOMATED MONITORING

Most video surveillance applications require human involvement in monitoring videos and events, and respond even to regular and routine situations. Such scenarios require security people to work mechanically like pre-programmed robots. But, humans are not effective robots and either get bored or tired and are likely to miss events or slow to respond.

Matrix has designed innovative Cognitive Response Engine (CREAM) to automate routine security scenarios consisting of multiple sequences of inputs/triggers and outputs/responses. This simple yet effective algorithmic approach allows running multiple such scenarios simultaneously to model any real life complex situation.

CREAM is completely user configurable and can meet any customer scenario. CREAM supports a wide range of inputs-triggers and outputs-responses, covering all practical possibilities.
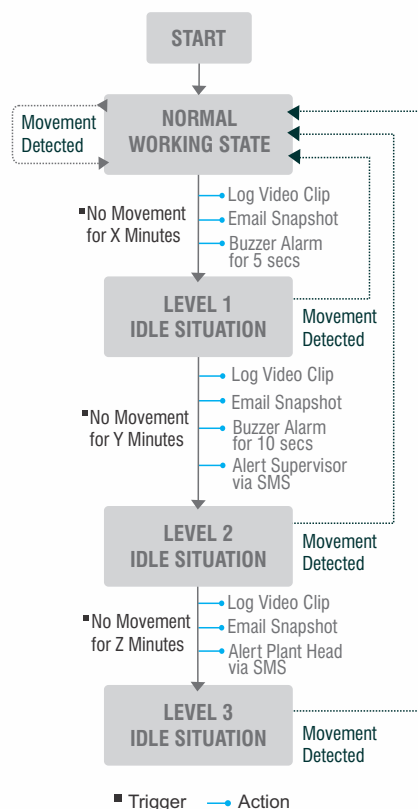
Features

- Automated Monitoring
- Cognitive Response
- Multiple Simultaneous Scenarios
- Multiple Inputs and Triggers
- Real-time Response
- Integration with External Systems such as Access Control, Fire Alarm, etc.
- User Inputs and Intervention
- Live Display and Tracking of Events and Responses
- Events and Responses Logs
- Reports

Advantages

- 24x7x365 Consistent and Predictable Surveillance
- Replace Security Staff with Technology
- Manage Situations Humans cannot Manage
- Prevent Humans Lapses
- Prevent Delays
- Integrated Holistic Security System
- Humans can Intercept and Override Automatic Execution of Scenarios.
- Live Monitoring with Flexibility for Humans to Intervene and Take Over or Override
- Audit Trail for Analysis and Correlation
- Analysis of System and User Activities

CREAM State Flow

START

NORMAL WORKING STATE — Movement Detected

No Movement for X Minutes
- Log Video Clip
- Email Snapshot
- Buzzer Alarm for 5 secs

LEVEL 1 IDLE SITUATION — Movement Detected

No Movement for Y Minutes
- Log Video Clip
- Email Snapshot
- Buzzer Alarm for 10 secs
- Alert Supervisor via SMS

LEVEL 2 IDLE SITUATION — Movement Detected

No Movement for Z Minutes
- Log Video Clip
- Email Snapshot
- Alert Plant Head via SMS

LEVEL 3 IDLE SITUATION — Movement Detected
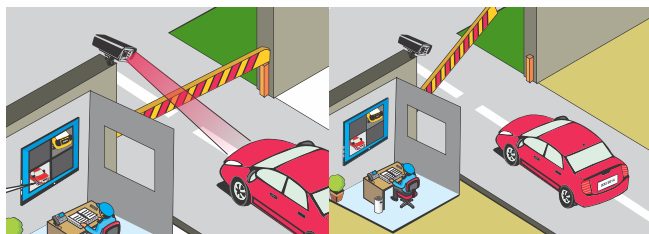
■ Trigger — Action

SAMAS VEHICLE TRACKING AND PARKING MANAGEMENT (VTPM)

Matrix Parking Management solution addresses the need for automated functioning of small, medium or large parking areas. Equipped with smart features, SAMAS VTPM can recognise license plates, notify unauthorized parking and keep track of number of occupied and empty slots. When integrated with Matrix IP Cameras and NVRs, VTPM becomes an end-to-end centralized parking management solution.
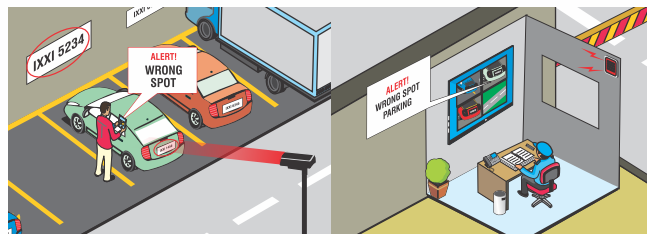
Parking Management Features

- License Plate Recognition
- Tailgating
- Prohibited Parking
- Wrong Way Detection
- Vehicle Overstay
- Most and Least Visited
- Most and Least Occupied
- Vehicle Counting
- Unauthorized Parking
- Improper Parking
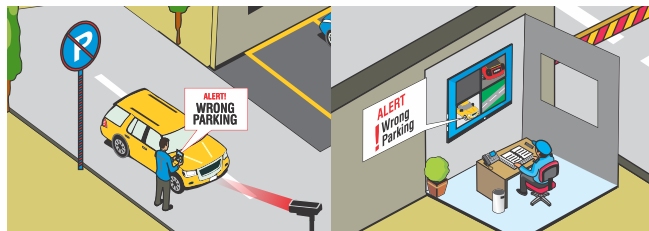- Premise Availability
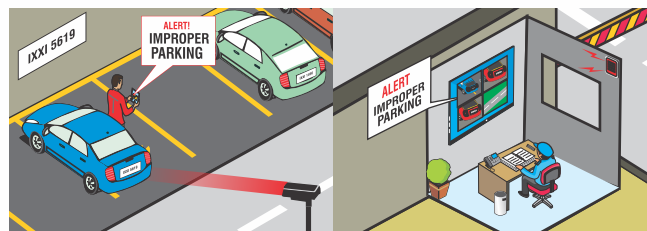- Parking after Closing Hours

Entry or Exit of Vehicles

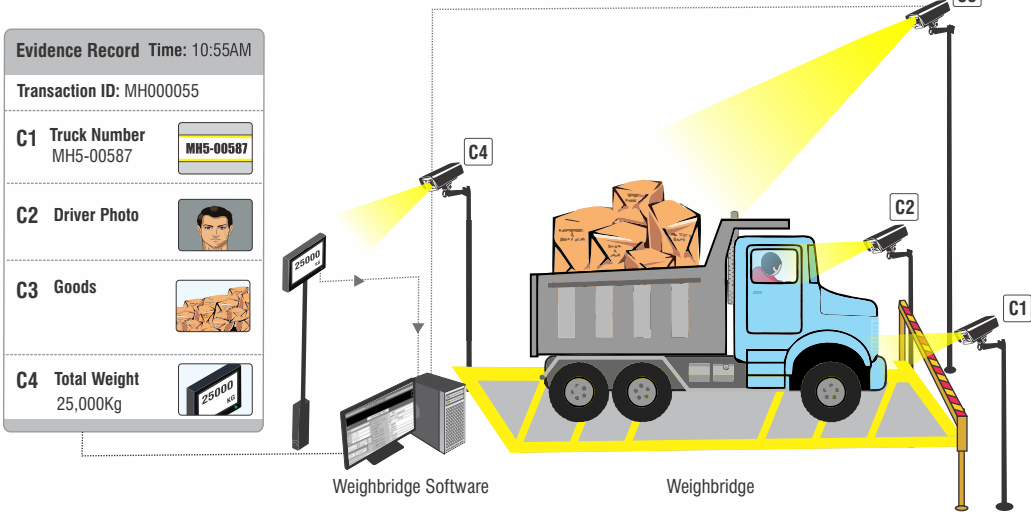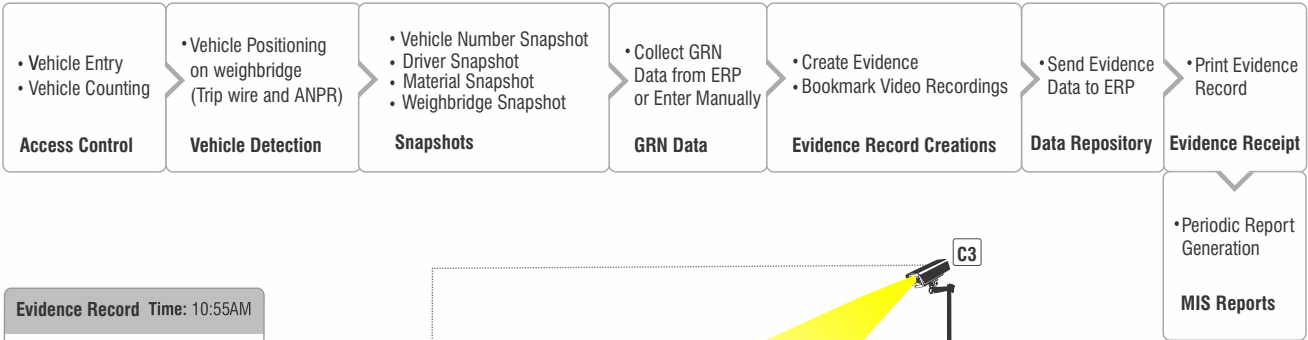
Unauthorized Parking

No Parking

Improper Parking

SAMAS WEIGHBRIDGE INTEGRATION

SAMAS Weighbridge collects pictorial evidence of inward or outward vehicles by mapping unique numbers such as License Plates, Challan Numbers or Token Numbers for further verification and auditing. Later, a supervisor can audit and a manager can approve every transaction by checking snapshots of the vehicle, driver, payload and weighing scale. SAMAS Weighbridge also supports seamless integration with the organization's ERP through API.

Weighbridge Workflow

Access Control	Vehicle Detection	Snapshots	GRN Data	Evidence Record Creations	Data Repository	Evidence Receipt
• Vehicle Entry • Vehicle Counting	• Vehicle Positioning on weighbridge (Trip wire and ANPR)	• Vehicle Number Snapshot • Driver Snapshot • Material Snapshot • Weighbridge Snapshot	• Collect GRN Data from ERP or Enter Manually	• Create Evidence • Bookmark Video Recordings	• Send Evidence Data to ERP	• Print Evidence Record

MIS Reports
• Periodic Report Generation

Evidence Record Time: 10:55AM

Transaction ID: MH000055

C1	Truck Number MH5-00587	MH5-00587
C2	Driver Photo	
C3	Goods	
C4	Total Weight 25,000Kg	25000 kg

Weighbridge Software Weighbridge

C1 C2 C3 C4

SAMAS VISION: APP FOR REMOTE SURVEILLANCE

VISION is a mobile application for Matrix SAMAS users to monitor and manage video surveillance from their mobile phones and tablets. VISION offers following features:

• Live and Playback Views
• Simultaneous View up to 16 Streams
• Camera Grouping
• Favorite Channels and Template
• Two Way Audio
• Telephony Integration
• Call Button for every Channel
• Digital Zoom
• PTZ Controls
• Mainstream and Substream
• Pictorial Evidence
• Android, iOS and Windows

SAMAS SMART CLIENT

A video surveillance user application designed for Windows to perform all activities such as Live View, Playback, Investigation, Events, Alerts, Pop-ups, Reports, Video Analytics, System Monitoring, etc. Multiple such Smart Clients can be created with different rights.
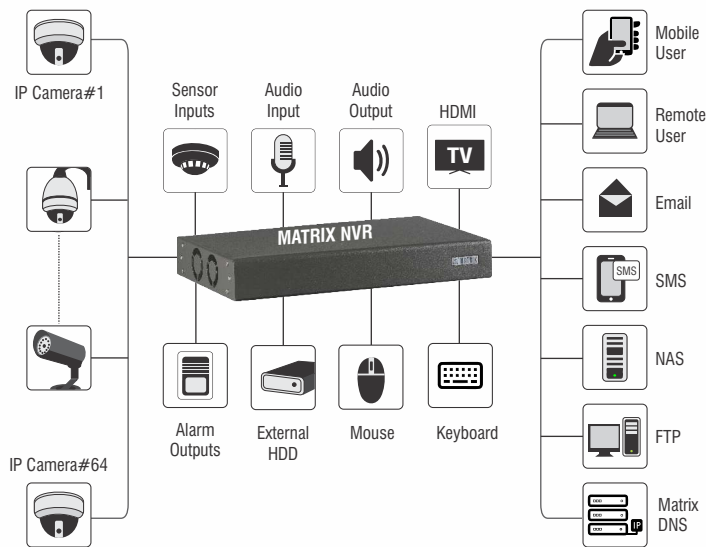
SAMAS SPECIFICATIONS

• Maximum No. of Cameras Supported: 65,535
• Maximum No. of Cameras Per Recording Server: 255
• Maximum No. of Concurrent Users supported: 65,535

• Maximum No. of Recording Server Supported: 65,535
• License is not required for Recording and Streaming Servers(RSS)

SATATYA PARAM - NETWORK VIDEO RECORDERS

SATATYA PARAM range of NVRs are high performing, power packed workhorses engineered for serious video surveillance deployments. In addition to high resolution recording and live view of multiple streams, they offer innovative cascading, powerful investigator and instant notifications. All in all, these flexible and reliable NVRs are ideal for modern organizations looking for proficient, persistent and preventive security. Comprehensive range of NVRs starting from 8 channels to 64 channels. Each variant is housed in a self-contained purpose built, sturdy, 19" mount enclosure.

NVR CONNECTIVITY

NVR DIFFERENTIATORS

Cascading
An innovative function allows linking of up to 20 NVRs to expand capacity and live view of all these cameras from any NVR in the loop.

Camera Initiation
NVR accepts cameras' registration request. Static IP is not required.

4K Decoding and HDMI 2.0
Powered by latest video processor, PARAM NVRs offer 4K resolution on HDMI 2.0 for live view and playback.

12MP Camera Recording
PARAM NVRs can handle ultra high resolution streams (up to 12MP) for recording and live view.

Ultra High Decoding Capacity
With power to decode up to 19 cameras streaming H.265 @ 2MP, Matrix PARAM is one of the most powerful NVRs in the market.

High Compression
With on-chip hardware compression, all popular algorithms such as H.265, H.264 and MJPEG, PARAM offers the flexibility to interface with all types of IP cameras and encoders.

Throughput
High resolution cameras dump large video data on the NVR, making throughput a very critical specification. Matrix PARAM is peerless with its capacity to handle 512Mbps.

RAID
Matrix PARAM offers RAID 0, RAID 1, RAID 5 and RAID 10, offering redundancy in video storage.

Adaptive Recording
Save upto 30% storage by switching to lower frame rate during no activity and to higher frame rate during activity.

Constant/Variable Bitrate
Optimize bandwidth usage by configuring every stream with either constant or variable bitrate.

Camera-wise Recording and Backup Days
Define separate retention days for recording and backup for every camera.

Storage
Store up to 80TB of video recordings on a single NVR.

Integration
Matrix NVRs integrate with third-party systems or devices using digital ports and directly with Matrix Access Control.

Instant Notifications
For real-time response and preventive security, Matrix NVRs offer instant notifications such as SMS, Email, Email with Snapshot, Direct Call from Mobile App and Video Pop-up.

TCP Notifications

Stay on top of situations in remote locations with limited connectivity and bandwidth. Using TCP Notifications, Matrix NVRs send alerts and notifications using bandwidth as low as 5Kbps.

Two Way Audio

Using built-in Audio-in and Audio-out ports, connect mic and speaker to capture audio, listen live and talk or make announcements.

Interop

Matrix PARAM offers built-in support for all popular brands of cameras in the market. Further it also supports ONVIF, RTP/RTSP over TCP/UDP for connecting other cameras.

Plug-n-Play and Auto Configuration

Matrix NVR automatically searches IP cameras and adds, assigns IP addresses and configures them with a single click.

Matrix DNS

NVRs and cameras can register their customized domain names on Matrix DNS which their clients can access to resolve.

Certification

Matrix NVRs meet national and international certification standards including CE, FCC, ROHS and BIS.

NVR SELECTION GUIDE

		NVR0801X	NVR1601X	NVR1602X	NVR3202X	NVR3204X	NVR6404X	NVR6408X
Video	IP Channels	8	16	16	32	32	64	64
	HDMI Main	1	1	1	1	1	1	1
Audio	Input	1	1	1	1	1	1	1
	Output	1	1	1	1	1	1	1
Alarm	Input	2	2	2	2	2	2	2
	Output	1	1	1	1	1	1	1
Storage	SATA Ports	1 (10TB each)	1 (10TB each)	2 (10TB each)	2 (10TB each)	4 (10TB each)	4 (10B each)	8 (10TB each)
	RAID Support	Single Disk	Single Disk	RAID 0, RAID 1	RAID 0, RAID 1	RAID 0,1,5,10	RAID 0,1,5,10	RAID 0,1,5,10
Interfaces	10/100/1000 Mbps Adaptive Interface	1	1	2	2	2	2	2
	USB Ports	3	3	3	3	3	3	3
Throughput		512Mbps, 256 Uplink/ 256 Downlink						

SIGHT: NVR MOBILE APPLICATION

SIGHT is a mobile application for Matrix NVR direct users without any server or software. SATATYA SIGHT offers following features:

- Live and Playback Views
- Simultaneous View of up to 16 Streams
- Manage up to 50 NVRs
- Favorite Channel
- Two Way Audio
- Call Button for every channel
- Digital Zoom
- PTZ Controls
- Mainstream and Substream
- Android, iOS and Windows

SATATYA NETRA - IP CAMERAS

Matrix offers best-in-class IP cameras specifically designed and built for demanding enterprise and project applications. In addition to superior image quality, these feature packed cameras offer Multiple Streams, Video Analytics and Edge Recording. Matrix IP cameras include dome, bullet and PTZ variants, suitable for both - outdoor and indoor applications.

IP CAMERAS DIFFERENTIATORS

Complete Range
Matrix IP camera range includes 5MP, 3MP, 2MP, Dome, Bullet, Varifocal and PTZ. Dome and bullet variants are offered with fixed and motorized lenses.

Sony STARVIS Sensor
Equipped with back illuminated Sony STARVIS sensors, Matrix cameras offer crystal clear night vision with color images even in ultra low light conditions up to 0.08 lux.

True Color Imaging
Matrix cameras use higher MTF lenses offering true colors and sharper images.

True WDR
Powerful image processor rectifies overexposed and underexposed areas and delivers clearer images.

Field of View
Matrix IP cameras capture wider field of view covering larger areas with fewer cameras.

Smart Streaming
Allows defining different image quality for different regions based on their importance.

Adaptive Streaming
Matrix cameras intelligently switch to lower bitrate and FPS during non-activity periods to conserve bandwidth and storage.

Quad Streams
Recognizing the need for multiple streams for different usages such as recording, local view, mobile, etc., Matrix cameras offer up to four simultaneous streams.

Region of Interest
Streams only the specified area from the entire image to zoom-in and to optimize bandwidth and storage.

H.265 Compression
New generation encoding reduces up to 50% of bandwidth and storage.

Video Analytics on the Edge
Matrix IP camera offers intelligent analytics including People Counting, Motion Detection, Trip Wire, Tamper Alert, etc. for real-time detection of events.

Edge Recording
With capacity to store videos in its 512GB SD card, Matrix cameras are ideal for many standalone applications. Moreover, edge recording can also be useful during network or server brownouts.

Instant Notifications
Matrix cameras offer SMS, Email with Snapshot, Upload Image/Clip, Alarms with Pre/Post Recording, and Schedule Snapshot.

Two Way Audio
Using built-in audio-in and audio-out ports, connect mic and speaker to capture audio, listen live, record audio and to talk or make announcements from your PC, tablet or mobile.

Camera Initiation
Matrix NVR/ SAMAS accepts cameras registration request. Static IP is not required. An IP camera automatically initializes request to connect to the NVR/ SAMAS.

Plug-n-Play
Camera DHCP client searches and fetches IP address. Matrix NVR searches for cameras and assigns predefined IP addresses and configures the cameras.
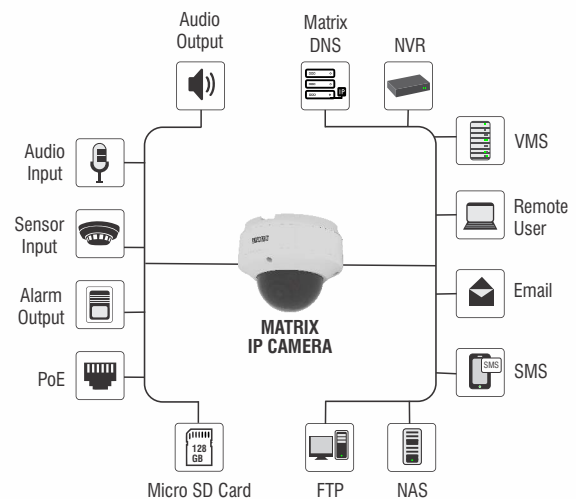
Matrix DNS
NVRs and cameras can register their customized domain names on Matrix DNS which their clients can access for viewing and configuration.

Certification
Matrix IP cameras meet national and international certification standards including IK10, IP67, CE, FCC, BIS, ROHS etc.

IP CAMERA CONNECTIVITY

IP PTZ Camera: PZCR20ML33CWP

- 33x Optical Zoom
- Maximum Resolution: 1920x1080 @ 60fps
- H.265/ H.264/ M-JPEG encoding
- IR Distance upto 200m
- Upto 256GB in-built storage
- IP67 & IK10 Compliant
- True WDR (140dB)
- Motion Detection, Tripwire, Missing Object Detection

IP PTZ Camera: PZCR20ML25CWP

- 25x Optical Zoom
- Maximum Resolution: 1920x1080 @ 60fps
- H.265/ H.264/ M-JPEG encoding
- IR Distance upto 150m
- Upto 256GB in-built storage
- IP66 & IK10 Compliant
- True WDR (140dB)
- Motion Detection, Tripwire, Missing Object Detection

IP CAMERA SELECTION GUIDE

BULLET	DOME	RESOLUTION	LENS	FOCAL LENGTH	2-WAY AUDIO	DIGITAL I/O	IR RANGE	STREAMS
PROJECT SERIES BULLET/DOME PREMIUM AND STANDARD								
CIBR50FL28CWP	CIDR50FL28CWP	5MP	FIXED	2.8mm	✓	✓	50m	3
CIBR50FL40CWP	CIDR50FL40CWP	5MP	FIXED	4.0mm	✓	✓	50m	3
CIBR50FL60CWP	CIDR50FL60CWP	5MP	FIXED	6.0mm	✓	✓	50m	3
CIBR50MVL12CWP	CIDR50MVL12CWP	5MP	MVF	2.7-13.5mm	✓	✓	50m	3
CIBR30FL28CWP	CIDR30FL28CWP	3MP	FIXED	2.8mm	✓	✓	50m	4
CIBR30FL36CWP	CIDR30FL36CWP	3MP	FIXED	3.6mm	✓	✓	50m	4
CIBR30FL60CWP	CIDR30FL60CWP	3MP	FIXED	6.0mm	✓	✓	50m	4
CIBR30MVL12CWP	CIDR30MVL12CWP	3MP	MVF	2.8-12mm	✓	✓	50m	4
CIBR20FL28CWP	CIDR20FL28CWP	2MP	FIXED	2.8mm	✓	✓	50m	4
CIBR20FL36CWP	CIDR20FL36CWP	2MP	FIXED	3.6mm	✓	✓	50m	4
CIBR20FL60CWP	CIDR20FL60CWP	2MP	FIXED	6.0mm	✓	✓	50m	4
CIBR20MVL12CWP	CIDR20MVL12CWP	2MP	MVF	2.8-12mm	✓	✓	50m	4
CIBR50FL28CWS	CIDR50FL28CWS	5MP	FIXED	2.8mm	—	—	50m	3
CIBR50FL40CWS	CIDR50FL40CWS	5MP	FIXED	4.0mm	—	—	50m	3
CIBR50FL60CWS	CIDR50FL60CWS	5MP	FIXED	6.0mm	—	—	50m	3
CIBR50VL12CWS	CIDR50VL12CWS	5MP	VF	2.7-13.5mm	—	—	50m	3
CIBR30FL28CWS	CIDR30FL28CWS	3MP	FIXED	2.8mm	—	—	50m	4
CIBR30FL36CWS	CIDR30FL36CWS	3MP	FIXED	3.6mm	—	—	50m	4
CIBR30FL60CWS	CIDR30FL60CWS	3MP	FIXED	6.0mm	—	—	50m	4
CIBR30VL12CWS	CIDR30VL12CWS	3MP	VF	2.8-12mm	—	—	50m	4
CIBR20FL28CWS	CIDR20FL28CWS	2MP	FIXED	2.8mm	—	—	50m	4
CIBR20FL36CWS	CIDR20FL36CWS	2MP	FIXED	3.6mm	—	—	50m	4
CIBR20FL60CWS	CIDR20FL60CWS	2MP	FIXED	6.0mm	—	—	50m	4
CIBR20VL12CWS	CIDR20VL12CWS	2MP	VF	2.8-12mm	—	—	50m	4
PROFESSIONAL SERIES BULLET/DOME PREMIUM AND STANDARD								
MIBR50FL28CWP	MIDR50FL28CWP	5MP	FIXED	2.8mm	✓	—	30m	3
MIBR50FL40CWP	MIDR50FL40CWP	5MP	FIXED	4.0mm	✓	—	30m	3
MIBR50FL60CWP	MIDR50FL60CWP	5MP	FIXED	6.0mm	✓	—	30m	3
MIBR30FL28CWP	MIDR30FL28CWP	3MP	FIXED	2.8mm	✓	—	30m	4
MIBR30FL36CWP	MIDR30FL36CWP	3MP	FIXED	3.6mm	✓	—	30m	4
MIBR30FL60CWP	MIDR30FL60CWP	3MP	FIXED	6.0mm	✓	—	30m	4
MIBR20FL28CWP	MIDR20FL28CWP	2MP	FIXED	2.8mm	✓	—	30m	2
MIBR20FL36CWP	MIDR20FL36CWP	2MP	FIXED	3.6mm	✓	—	30m	2
MIBR20FL60CWP	MIDR20FL60CWP	2MP	FIXED	6.0mm	✓	—	30m	2
MIBR50FL28CWS	MIDR50FL28CWS	5MP	FIXED	2.8mm	—	—	30m	3
MIBR50FL40CWS	MIDR50FL40CWS	5MP	FIXED	4.0mm	—	—	30m	3
MIBR50FL60CWS	MIDR50FL60CWS	5MP	FIXED	6.0mm	—	—	30m	3
MIBR30FL28CWS	MIDR30FL28CWS	3MP	FIXED	2.8mm	—	—	30m	4
MIBR30FL36CWS	MIDR30FL36CWS	3MP	FIXED	3.6mm	—	—	30m	4
MIBR30FL60CWS	MIDR30FL60CWS	3MP	FIXED	6.0mm	—	—	30m	4

BULLET	DOME	RESOLUTION	LENS	FOCAL LENGTH	2-WAY AUDIO	DIGITAL I/O	IR RANGE	STREAMS
PROJECT SERIES BULLET/DOME PREMIUM AND STANDARD								
MIBR20FL28CWS	MIDR20FL28CWS	2MP	FIXED	2.8mm	–	–	30m	2
MIBR20FL36CWS	MIDR20FL36CWS	2MP	FIXED	3.6mm	–	–	30m	2
MIBR20FL60CWS	MIDR20FL60CWS	2MP	FIXED	6.0mm	–	–	30m	2

Note: P: Premium; **S**: Standard; **MVF**: Motorized Varifocal; **VF**: Varifocal

CIBR: PROJECT SERIES BULLET

MIBR: PROFESSIONAL SERIES BULLET

CIBR: PROJECT SERIES DOME

MIBR: PROFESSIONAL SERIES DOME

MATRIX SATATYA CUSTOMERS

CORPORATE
- Samsung C&T
- TCS Technology
- SGI Corp
- Tata Technologies
- Raymond
- Jaypeekint Lab
- COX & KINGS
- Honda Trading Corporation
- Rustom Jee
- Sterlite Technology
- Coromandel Fertilizer

GOVERNMENT
- Indian Railways
- Indian Air Force
- NTPC
- Patna Airport

- Bhubaneswar Airport
- NSTL
- Nashik Railways

EDUCATION
- IIT
- RBK International School
- NIFT
- Chitkara Group of Institute
- GITAM University
- GMERS College

MANUFACTURING
- Godrej Ware House
- Tata Motors
- Tata Chemicals
- General Electronics
- Schneider Electric

- Colourtex
- Yamaha Motors
- Jasani
- Cooper Corporation

MEDIA
- Network 18
- Times of India
- Matrimony.com
- Ramoji Film City

HOSPITALITY
- Hotel Royal Park
- Taj Group
- Taj Vivanta

OTHERS
- Lenskart
- Tanishq
- Sanofi Pharma
- Deccan Chemicals
- Raheja Hospital
- NESCO
- BTI Payments
- Dnata Group
- Haldiram
- Ramdev Masala
- NSEIT
- Vedanta Group
- HEG
- AWHO Township

ABOUT MATRIX

Established in 1991, Matrix is a leader in Security and Telecom 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 Security and Telecom industries. With around 40% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products like Video Surveillance Systems - Video Management Software, Network Video Recorder and IP Camera, Access Control and Time-Attendance Systems as well as Telecom Solutions such as Unified Communications, IP-PBX, Universal Gateways, VoIP and GSM Gateways and Communication Endpoints. These solutions are feature-rich, reliable and conform to the international standards. Having global footprints in Asia, Europe, North America, South America and Africa through an extensive network of more than 2,500 channel partners, Matrix ensures that the products serve the needs of its customers faster and longer. Matrix has gained trust and admiration customers representing the entire spectrum of industries. Matrix has won many international awards for its innovative products.

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