



MATRIX SATATYA IP CAMERAS

AGENDA

01



WHY MATRIX?

Three
Dimensional
Benefits:
Proficient,
Persistent and
Preventive

02



CAMERA INTRODUCTION

Nomenclature,
Camera Range
and Camera Type

03



KEY FEATURES

Analytics,
Storage/
Bandwidth
Optimization and
Superior Image
Quality

04



TECHNICAL SPECIFICATIONS

05



CONTACT US

THE VIDEO SURVEILLANCE MARKET

Overpriced Brands

- Very Expensive Products
- Smaller Market and Difficult to Sell
- Slow Sales Cycle
- Brand over Product Performance

- High Profits and Less Competition
- Gain Customer Loyalty
- Value for Money
- Quick Support
- Faster Sales Cycle

Matrix SATATYA

Cheap Products

- Low Profits and Very High Competition
- Loss of Your Credibility
- Lose Customer in the Long Run
- Inferior Quality and Lack of Support

ABOUT MATRIX

- Established in 1991
- Products: 60+ Telecom and Security Solutions
- Global Presence: 40+ Countries
- Multi-location Installations with: 500+ Channel Partners
- No of Employees: 500+
- Awards and Achievements: 25+ for Excellence in Product Engineering, Design and Innovation



R&D CENTER

77,000 Sq.Ft

More than 40% Manpower in R&D, 700+ Man-years of R&D Experience
World-class Technology Platform and Processes



CORPORATE OFFICE

Based at Vadodara, Gujarat, India

Departments: Marketing, Sales, Product Management, Support, Finance, Customer Care, Purchase











MANUFACTURING UNIT

73,000 Sq.Ft

100+ Work Stations
International Quality Systems and Processes

WHY MATRIX?

MATRIX SATATYA THREE DIMENSIONAL BENEFITS

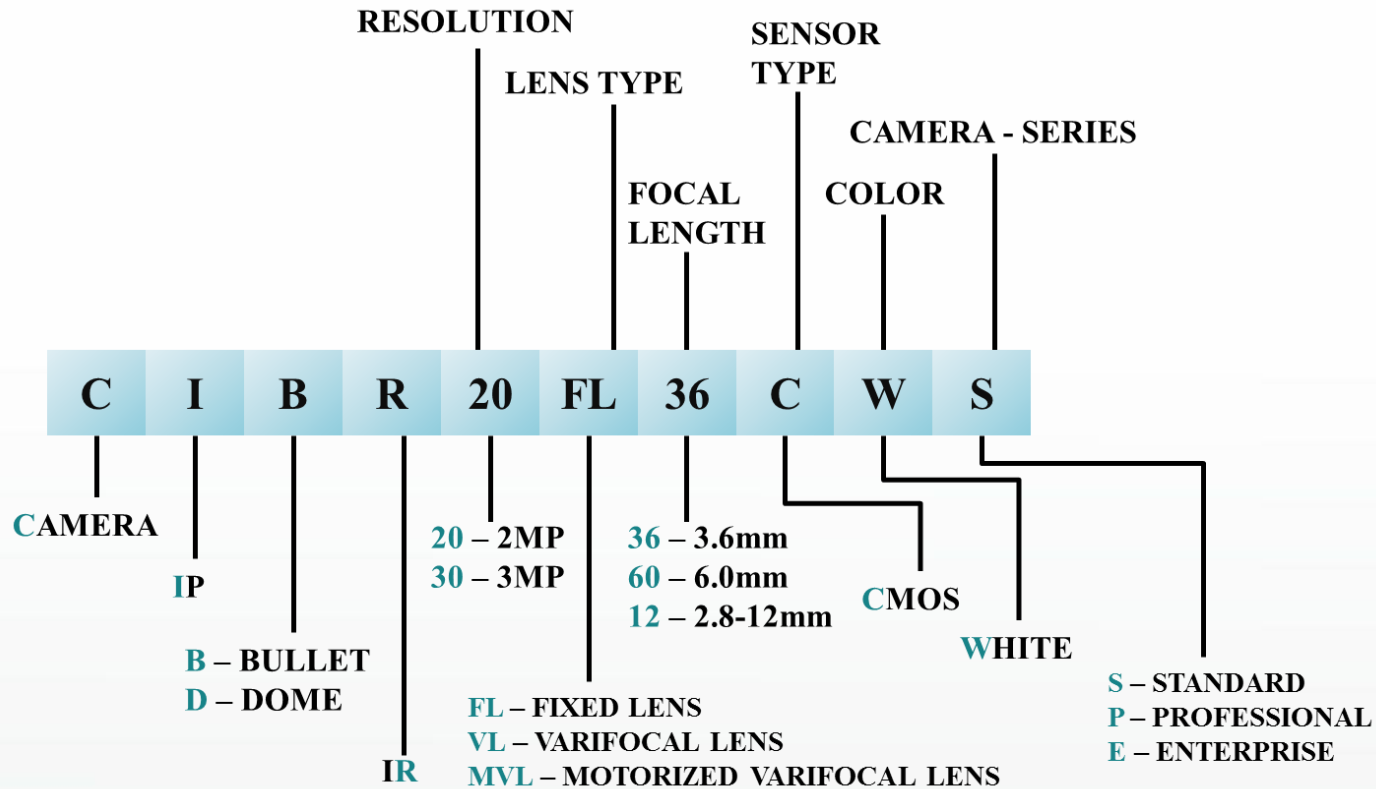
PROFICIENT	PERSISTENT	PREVENTIVE
 <p>REDUCTION IN SOLUTION COST of Bandwidth, Storage and Manpower</p>	 <p>BETTER RELIABILITY against Downtime and Breakdowns</p>	 <p>ENHANCED SECURITY of physical assets from Theft, Snooping, etc.</p>
 <p>IMPROVED EFFICIENCY in Productivity, Process Compliance and Employee Discipline</p>	 <p>GREATER VISIBILITY & CONTROL</p>	 <p>IMPROVED SAFETY of Human Assets from Accidents, Hazards and Injuries</p>
 <p>SIMPLICITY OF MANAGEMENT</p>		 <p>PROACTIVE SOLUTION with Early Detection and Instant Notification</p>



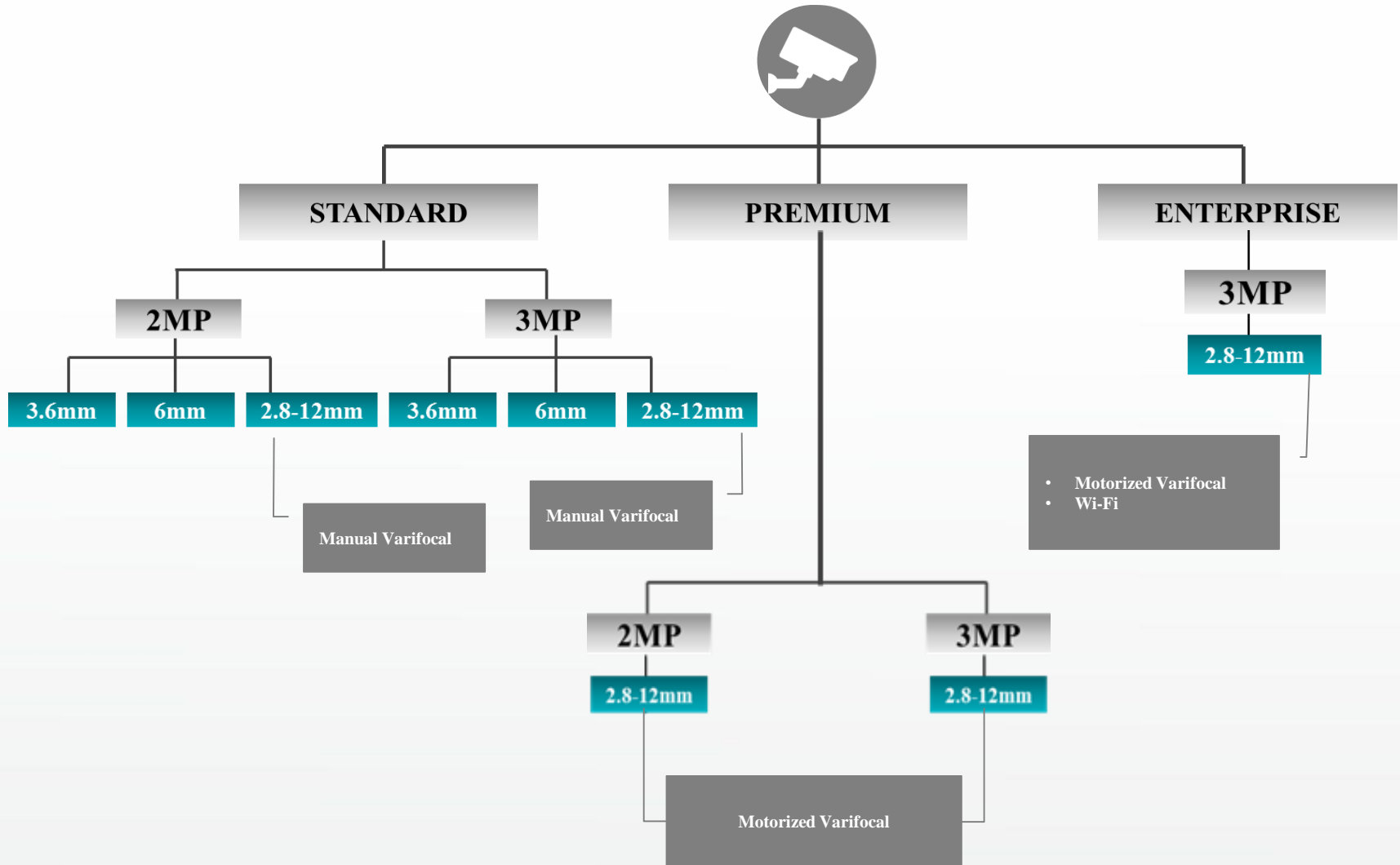
MATRIX SATATYA CAMERA INTRODUCTION



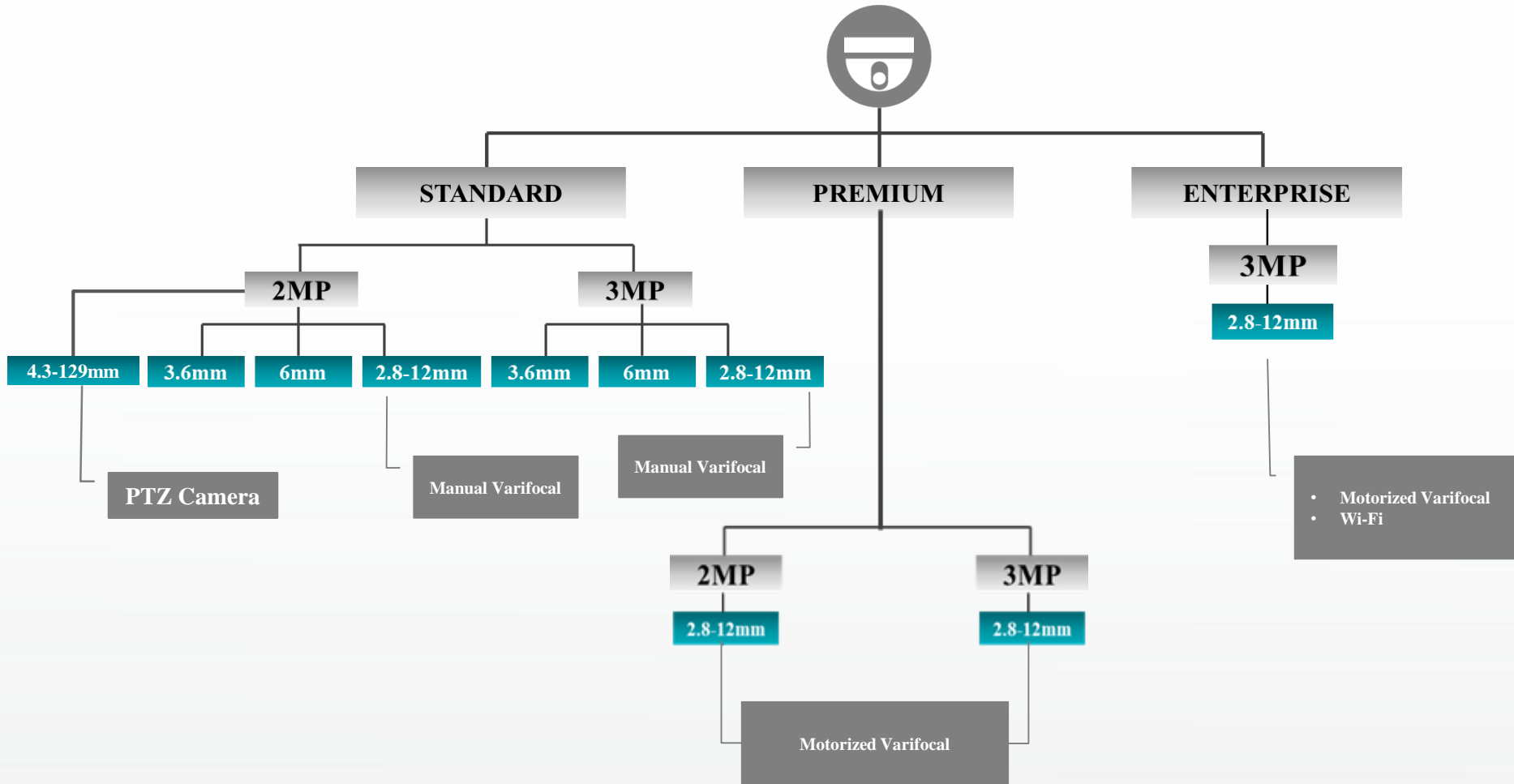
CAMERA NOMENCLATURE



BULLET CAMERA VARIANTS



DOME CAMERA VARIANTS





 **MATRIX**
SECURITY SOLUTIONS

MATRIX SATATYA CAMERAS KEY DIFFERENTIATORS

CONNECTIVITY

Push Technology: Communication with the server is initiated from camera's end, which reduces load on the server and helps in uninterrupted network connection (In other traditional devices server has to poll at regular interval which increases server load at great extent)

Whenever devices are connected in multi locations, public IP is required only at server end. This makes multi-location deployment of devices very easy, cost effective and time bound. Push technology reduces server load using limited socket connections as per requirement with poll.

IMAGE QUALITY

1. SONY STARVIS series sensors: The sensor is made with SONY's patent EXMOR Technology wherein the sensor is back-illuminated, which results in less dark current thereby giving exceptionally good color image reproduction at as low as 0.02lux.



Outdoor



Indoor

IMAGE QUALITY

2. **True WDR:** The camera smartly varies its exposure time and rectifies the over-exposed and under-exposed areas in the scene thus giving more informative and clear image.



WDR: OFF



WDR: ON



Double click for video

IMAGE QUALITY

3. 2D and 3D Noise Reduction Technique: Analyzes frames of video, using special algorithm filter to mitigate the effects of noise. In summary, the benefit of noise reduction is:

- Improve image quality for better object identification
- Reduced file size for lower bandwidth and storage requirements
- Fewer false alarms for video motion detection

4. E-PTZ and Digital zoom functionality: E-PTZ enables pan, tilt and zoom of a camera even though the camera does not physically move. Users are still able to digitally zoom and navigate the camera's viewable area. This helps users to have an even more detailed and richer surveillance experience.

OPTIMIZATION

1. Adaptive Streaming: Records at lower bit-rate during non-activity period.

2. Smart Streaming: Smart Streaming is a technology which divides a single stream into multiple resolutions based on its importance. Here only important scenes are streamed at a higher video quality and other areas of less importance are streamed at a lower resolution, thus saving on network bandwidth, as well as on storage capacity. The result is surveillance video that preserves video quality where it matters, while significantly reducing overall network bandwidth consumption.



Double click for video

OPTIMIZATION

- 3. **Region of Interest:** Allows streaming and recording of only critical from the entire image.
- 4. **Four Stream Support:** Different streams for viewing storing and recording. This helps in best utilization of allotted bandwidth.
- 5. **H.265:** Latest Video Compression Technique
- 6. **SD Card Support:** up to 64GB



Regular Stream



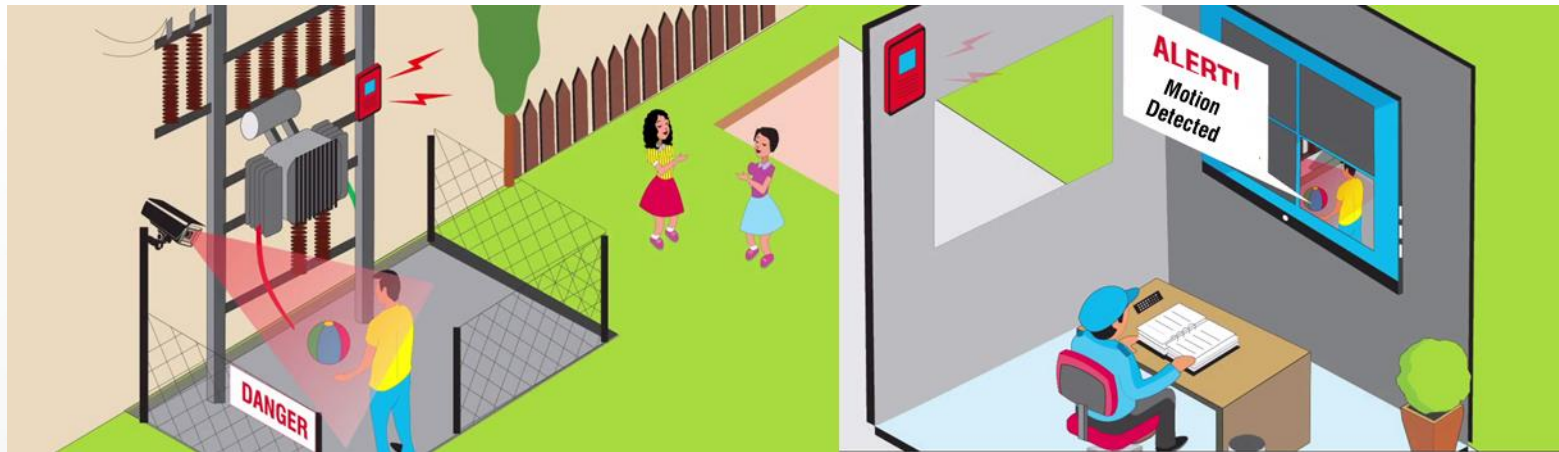
ROI Stream



Double click for video

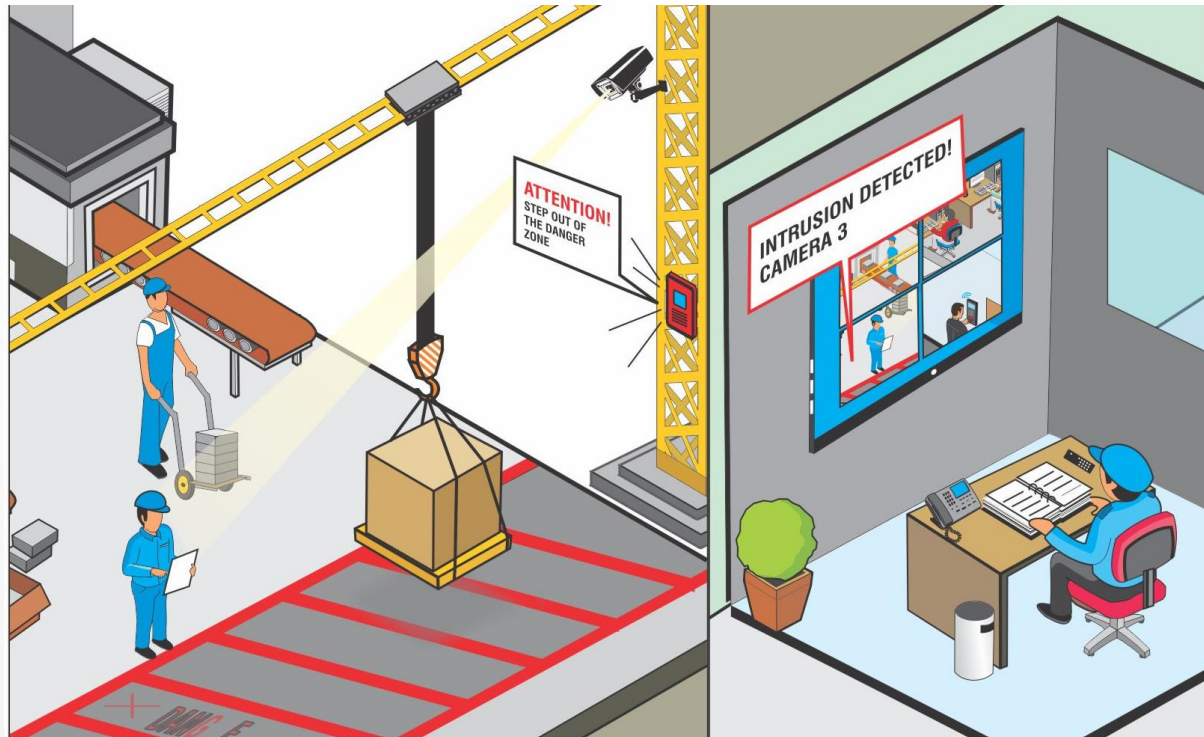
EVENTS

1. Motion Detection: Helps you mark critical areas where motion should not occur. If motion occurs, it sends instant notifications.



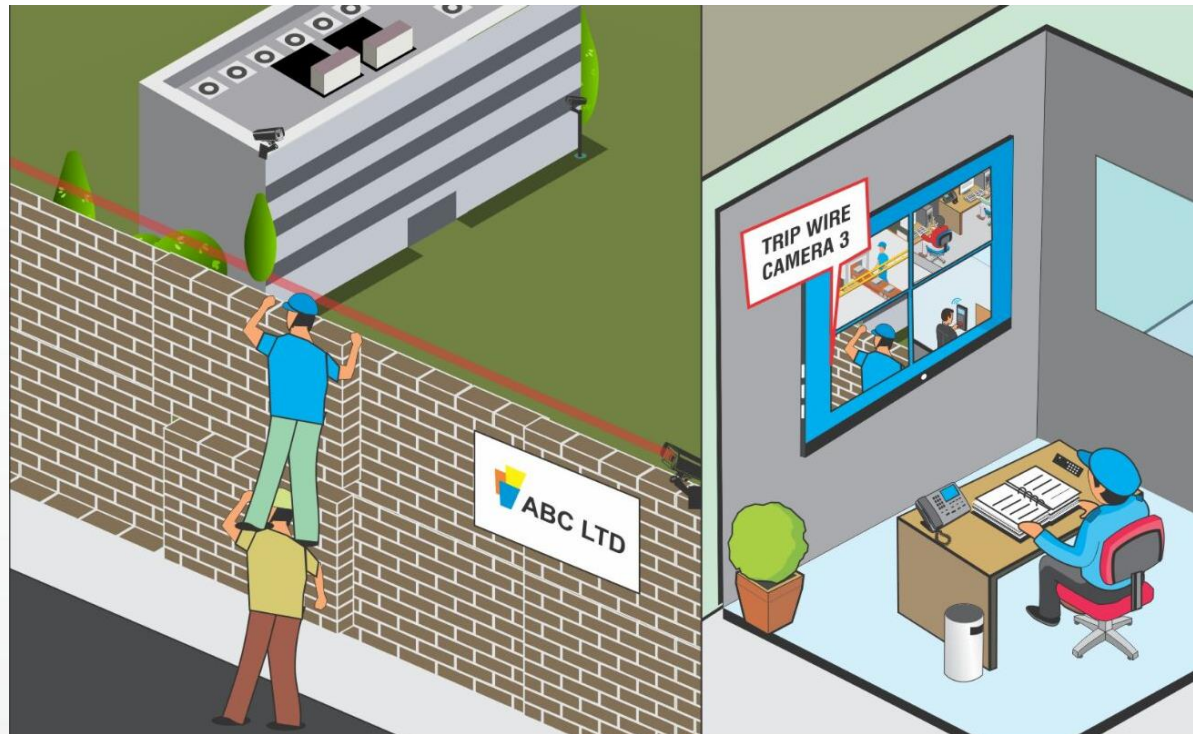
EVENTS

2. Intrusion Detection: Provides notification on entry or exit from a high security or dangerous area. These notifications are in the form of SMS, email, video pop up, audio, alarm etc.



EVENTS

3. Trip Wire: It identifies any motion over a defined virtual line. This can be extremely useful in perimeter security by virtual fencing.



EVENTS

Other Events:

4. **Network Disconnect:** Provides notification on detection of a network disconnection.
5. **IP Conflict:** Provides notification in case of more than one camera having the same IP.
6. **Storage Alert:** Sends out an alert in case the SD card of the camera gets full.

ALERTS

- 1. Upload Image/Clip:** Upload snapshot or clip to a pre-defined path(SD, NAS or FTP) on occurrence of any suspicious event.
- 2. Pre and Post alarm recording:** On the occurrence of any event like motion detection, Pre Alarm based recording from 0-30 seconds and Post Alarm based recordings from 10-300 seconds can be scheduled.
- 3. Snapshot schedule:** Snapshots can be sent at a regular interval irrespective of events taking place to ensure proper functioning of system and processes
- 4. Email with snapshot:** On detection of threat or fault in functioning of cameras, system will send email with snapshot
- 5. SMS:** Sends SMS to the assigned number whenever a threat or event occurs. This does not require any SIM card



Other Solutions



Matrix Solutions





MATRIX SATATYA CAMERA PERFORMANCE



CAMERA PERFORMANCE VIDEOS



Day Indoor



Night Indoor



Day Outdoor



Night Outdoor


NOTE: Double click on the Image to view respective video




MATRIX SATATYA TECHNICAL SPECIFICATIONS




2MP BULLET CAMERA

	SATATYA CIBR20FL36CW-S	SATATYA CIBR20FL60CW-S	SATATYA CIBR20VL12CW-S
Sensor Type and Size	<p style="text-align: center;">Sensor</p> <p style="text-align: center;">SONY - CMOS 2MP Active Pixel Progressive Scan, Back Illuminated Image sensor(Exmor Technology - STARVIS Series) Size: 1/2.8"</p>		
Spectral Response	300nm - 1000nm		
Minimum Illumination(B/W)	0 Lux with IR LED On		
Lens			
Lens Type	Fixed Iris		Manual Verifocal with P-Iris
Lens Properties	Megapixel IR-corrected Lens		
Focal Length	3.6mm	6mm	2.8-12mm
HFOV(degrees)	86°	52°	106° to 32°
Lens Mount	M12x0.5		M14
Minimum Object Distance	0.3m		
Aperture	F 1.2	F 2.0	F 1.4
Iris Control	No		Yes
Zoom	No		Yes(Manual)
Focus	No		Yes(Manual)
IR-LED			
IR LED type	4 - Array LEDs		
IR range	20m		


2MP BULLET CAMERA

	SATATYA CIBR20FL36CW-S	SATATYA CIBR20FL60CW-S	SATATYA CIBR20VL12CW-S
	Stream Parameters		
Maximum Resolution	1920*1080(2MP) @ 30fps		
Available Resolutions	1080p(2MP)/720p/D1/2CIF/CIF		
Stream Profiles	<p>Four streams are supported</p> <p>Profile 1: 2MP up to 30fps (H.265/H.264)</p> <p>Profile 2: D1 up to 5fps (MJPEG)</p> <p>Profile 3: D1 up to 30fps (H.265/H.264)</p> <p>Profile 4: 720p up to 30fps (H.265/H.264/MJPEG)</p>		
Max. Number of Simultaneous Streams	4		
Bitrate Type	CBR/VBR		
Bitrate	512Kbps - 4Mbps		
Video Compression	H.265/H.264/MJPEG		
Frame Rate	1 - 30fps		
GOP	1 - 100		
Shutter Speed	1/12500s to 1/25s		
Adaptive Stream	Yes		
Smart Stream	Yes (Max. 3 Windows)		
ONVIF Profile	S		


2MP BULLET CAMERA

	SATATYA CIBR20FL36CW-S	SATATYA CIBR20FL60CW-S	SATATYA CIBR20VL12CW-S
	Image Parameters		
ROI	Yes		
BLC	Yes		
White Balance	Auto/Fluorescent/Incandescent/Sunny		
Digital Zoom	Yes		
E-PTZ	Yes		
Digital WDR	Yes		
True WDR	Yes		
Noise Filter(2DNR)	Yes (Auto/Manual)		
3DNR	Yes (Auto/Manual)		
Image Enhancement	Saturation/ Contrast/Brightness/Hue/Sharpness/Rotate		
Edge Recording	Yes		
Network Recording	Yes		
Image-Snapshots	Yes		
Hardware Parameters			
Standard POE	802.3af		
SD card	Yes (Up to 64 GB)		
Power Supply	12V/2A		
Power Consumption	Less than 7W		
LAN Port Speed	10/100 Mbps		


2MP BULLET CAMERA

	SATATYA CIBR20FL36CW-S	SATATYA CIBR20FL60CWS	SATATYA CIBR20VL12CWS
	Video Analytics		
Motion Detection	Yes		
View Tamper	Yes		
Line intrusion/ Directional motion/ Trip Wire	Yes		
Zone Intrusion	Yes		
IP-Conflict	Yes		
Network-Disconnect	Yes		
Storage Alert	Yes		
Actions	Email/TCP/ SMS Notifications , Alarm Recording & Image/Clip Upload		
Environmental			
Operating Temperature/Humidity	0 to 50 Degree Celsius		
Storage Temperature	(-)20 to 60 Degree Celsius		
Certification(In-House)			
CE	Yes		
FCC Part-15 Class-B	Yes		
Ingress Protection	IP66		
Physical Dimensions			
Length	320mm		
Height	84.5mm		
Width	92.5mm		
Weight	920gm		


2MP DOME CAMERA

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Spectral Response	300nm - 1000nm		
Minimum Illumination(B/W)	0 Lux with IR LED On		
Lens			
Lens Type	Fixed Iris		Manual Verifocal with P-Iris
Lens Properties	Megapixel IR-corrected Lens		
Focal Length	3.6mm	6mm	2.8-12mm
HFOV(degrees)	90°	57°	106° to 32°
Lens Mount	M12x0.5		M14
Minimum Object Distance	0.3m		
Aperture	F 1.2	F 1.2	F 1.4
Iris Control	No		Yes(Auto/Manual)
Zoom	No		Yes(Manual)
Focus	No		Yes(Manual)
IR-LED			
IR LED type	30 - Through-hole LEDs		
IR range	20m		


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True WDR	Yes		
Noise Filter(2DNR)	Yes (Auto/Manual)		
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Image Enhancement	Saturation/ Contrast/Brightness/Hue/Sharpness/Rotate		
Edge Recording	Yes		
Network Recording	Yes		
Image-Snapshots	Yes		

2MP DOME CAMERA

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IP-Conflict	Yes		
Network-Disconnect	Yes		
Storage Alert	Yes		
Actions	Email/TCP/ SMS Notifications , Alarm Recording & Image/Clip Upload		
Environmental			
Operating Temperature/Humidity	0 to 50 Degree Celsius		
Storage Temperature	(-)20 to 60 Degree Celsius		
Certification(In-House)			
CE	Yes		
FCC Part-15 Class-B	Yes		
Ingress Protection	IP66		
Physical Dimensions			
Diameter	158mm		
Height	134mm		
Weight	1400gm		

CONTACT US

For further information:

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Website: www.MatrixSatatya.com

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THANK YOU