

# SECURITY & SURVEILLANCE

Smart Cities

Presented by:

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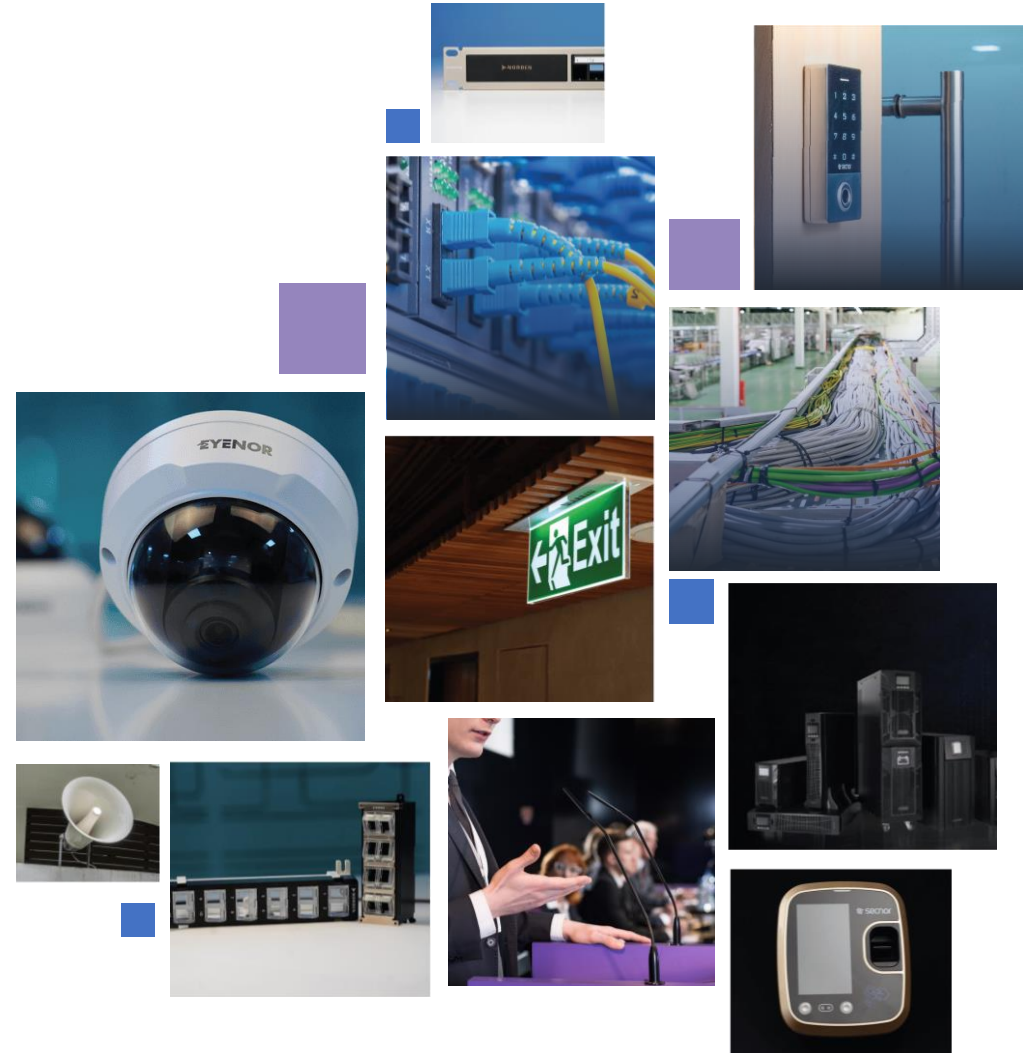
# ABOUT NORDEN

## NORDEN IS A GLOBAL BRAND FOR SURVEILLANCE, SECURITY, CONNECTIVITY AND CABLING SOLUTIONS.



# PRODUCT RANGE

- Surveillance Systems (EyeNor)
- Public Address Systems (NVS)
- Access Control Systems (SecNor)
- Racks and Cabinets
- UPS Systems
- Fibre System (OptiNor)
- Copper System (DataNor)
- Data Centre Solution
- MPO/MTP Solutions
- Fire Resistant Cable
- Industrial Cable
- BMS Cable
- Coaxial Cables
- Instrumentation & Audio Cables
- Exit Sign Lights



## Surveillance System in Smart City

Surveillance cameras have greatly reduced crime and worked to maintain the city's law and order in Smart City Projects. On most occasions, CCTV cameras installed in public places has helped the police department to prevent any mishaps and/or identify evidence.

### Surveillance System consists of

- Dome Cameras at ICC
- Fixed Bullet / Box cameras at traffic signals and public places for general surveillance.
- PTZ cameras at public places which will have the Pan, Tilt and Zoom functions for Auto Tracking and Long Distance Monitoring.



# FRS (Face Recognition System)

## Face Recognition

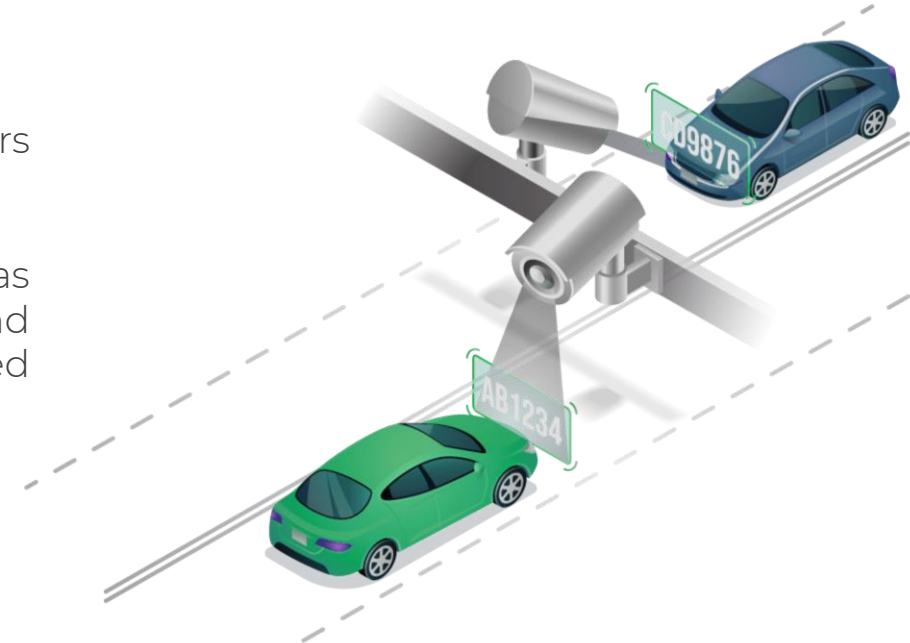
A Biometric method of identifying an individual by comparing live capture or digital image data with the stored record of that person. Facial Recognition systems are commonly used for security purposes but are increasingly being used in a variety of other applications.



# Intelligent Traffic Management System (ITMS)

## Automatic Number Plate Recognition

- A statutory requirement to capture all the vehicle numbers and keep them for future reference.
- Automatic Number Plate Recognition uses ANPR cameras and associated software. The numbers will be captured and kept in a database as images and OCR-based converted files.



# Intelligent Traffic Management System (ITMS)

## Red Light Violation Detection

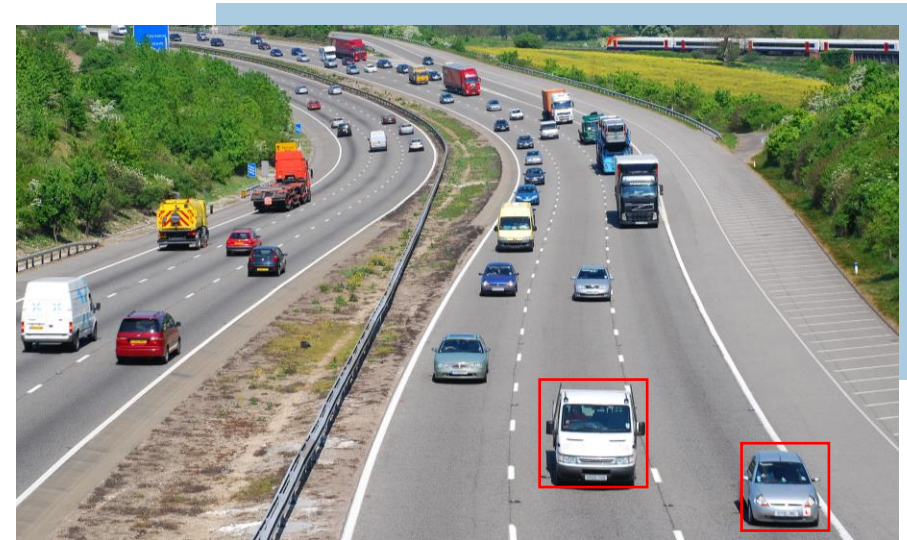
- A statutory requirement to capture all the vehicles which violate the red-light signals and keep them for future reference.
- ANPR cameras and associated RLVD software are used for Red Light Violation Detection. The vehicles and numbers will be captured and kept in a database as images and an OCR-based converted file.



# Intelligent Traffic Management System (ITMS)

## Speed Violation Detection

ANPR cameras and related SVD software are used for speed violation detection. The vehicles and number plates will be captured and stored in a database as images and an OCR-based converted file.





# Intelligent Traffic Management System (ITMS)

## No Helmet Detection

No Helmet Detection is a system to detect people with/without helmets. No helmet detection technology removes manual intervention and brings transparency in the booking of violations, wherein a challan will be sent to the violator (without a helmet) by capturing the number plate of the vehicle and video clip of the violator.



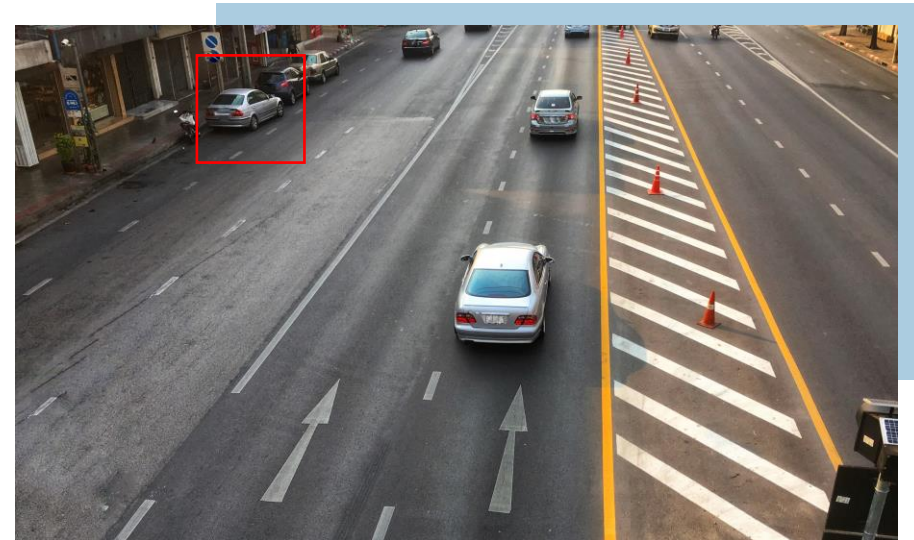
# Intelligent Traffic Management System (ITMS)

## Illegal Parking Detection

Detects the vehicles parked by the roadside or in the areas where parking is prohibited.

The violations include:

- Overdue Parking
- Wrong parked vehicle
- Prohibited area parking



## Specialized Products



**4K Long Range Bullet Camera**

- 8MP Resolution
- 5 to 50mm Motorized focal Length
- 100mtr IR
- NDAA Compliant



**Box Camera**

- 5MP/ 8MP Resolution
- NDAA Compliant
- Quad Stream with 2 streams at 1080P resolution



**50X Laser PTZ Camera**

- 2MP/ 4MP Resolution
- 50X Optical Zoom
- 500mtr Laser IR
- Dual 1080P Stream

# Explosion & Corrosion Proof Cameras



**Bullet Camera**

- 2MP / 5MP / 8MP Resolution Cameras
- 304 / 316L Stainless Steel Housing
- **ATEX, IECEx, CCoE** Certified
- Up to 200M IR Support
- Optional SFP Port



**PTZ Camera**

- 2MP / 4MP / 5MP Resolution Cameras
- 304 / 316L Stainless Steel Housing
- **ATEX, IECEx, CCoE** Certified
- Up to 200M IR Support
- Optional SFP Port



**Dome Camera**

- 2MP / 4MP / 5MP Resolution Cameras
- 304 / 316L Stainless Steel Housing
- Up to 50M IR Support
- IK10 Support
- Optional SFP Port

## Thermal Cameras



**Bullet Camera**

- 640×512 / 400×300 Thermal Resolution
- 15 / 25 / 35 / 50 / 75mm Thermal Lens
- PoE Support



**PTZ Camera**

- 2MP Visible Resolution Cameras
- 30X / 32X / 37X / 60X Optical Zoom Lens Cameras
- 640×512 / 400×300 / 256×192 Thermal Resolution

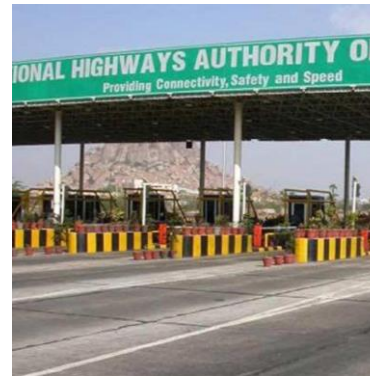


**Body Temperature Detection Camera**

- 2MP Visible Resolution Cameras
- 400×300 / 256×192 Thermal Resolution
- ± 0.3° C Accuracy

## Projects delivered on Norden Products

- Food & Civil Supply Gujarat - 6000 + IP Cameras & Passive Products.
- Varanasi Smart City - 2400 + IP Cameras including & Fibre accessories.
- Knowledge Consortium of Gujarat (KCG) – 1500 + IP Cameras & Passive Products.
- Noida ITMS – 1400 +
- Trivandrum ITMS – 1000+ IP Cameras
- National Highways Authority Of India – 2600 + IP Cameras



## Projects delivered on Norden Products

- General Services Group (Department of Atomic Energy, Chennai - IGCAR)
- Science and Technology Department, Gujarat.
- Gujarat University, Ahmedabad.
- BASF Catalysts India Pvt Ltd.
- Biocon Limited.
- Indian Oil Corporation Limited (IOCL)
- Bharat Petroleum Corporation Ltd (BPCL)
- The Oil and Natural Gas Corporation (ONGC)
- Hindustan Petroleum Corporation Ltd (HPCL)
- Engineers India Limited (EIL)
- Parco Institute of Medical Sciences
- Rail Coach Factory, Kapurthala
- NS Cooperative Hospital
- Multi Commodity Exchange of India Ltd, Mumbai
- E-Health Kerala
- Mumbai Airport and much more



# Public Address & Emergency Call Box Solution



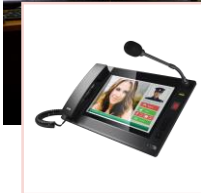
Traffic Junction



Admin Building  
Conference Room



Bus Station



Command  
Control Centre



# Public Address & Emergency Call Box Solution



Outdoor Audio Intercom



IP Wall-mount Video Intercom Terminal



Explosion-proof Video Intercom

- Outdoor type audio Intercom panel
- Strong anti-riot property & automatic door-covering technology
- Supports initiating and receiving offline intercom.
- User-defined quick call target to achieve one-click call.
- Explosion-proof intercom terminal, suitable for places that contain explosive gas and dust.

## IP/SIP Speakers



**IP/SIP PoE Horn Speaker**



**IP/SIP PoE Wall Mount Speaker**



**IP/SIP Column Speaker 30/60/120W**

- Network-based design
- Supports SIP protocol
- Automatic Volume level control
- IP65 Protection
- Built-in digital signal processor
- Scheduled announcements
- In-built memory for storing pre-scheduled programs

# Digital Conference System



**Intelligent Conference Host**



**Desktop Chairman Microphone**



**Desktop Delegate Microphone**



**HD PTZ Conference Camera**

- Hand-in-hand loop connection method
- Conference modes are first-in first-out (FIFO), limitation of speaking, chairman only, time- limited speak mode.
- Conference audio recording function
- External Audio input
- Integration with online meeting platforms

- Microphones are of Tabletop structure
- 3.5mm stereo headphone jack for connecting headphones and the headphone volume is adjustable.
- Automatic Camera-tracking function
- Supports VISCA, PELCO-D, PELCO-P protocols.
- 2D and 3D noise reduction technology, results in clear image in low-light environment.

**THANKS**

