

# SMART OFFICE SOLUTIONS



Be secure ... Be connected

## The Solution designed considering

- New construction Basement
- Retrofit -

**Smart Offices**, like **smart** cities, are defined as places where devices and applications create new experiences or services and facilitate operational efficiency.



**Consult**



**Design**



**Identify**



**Integrate**



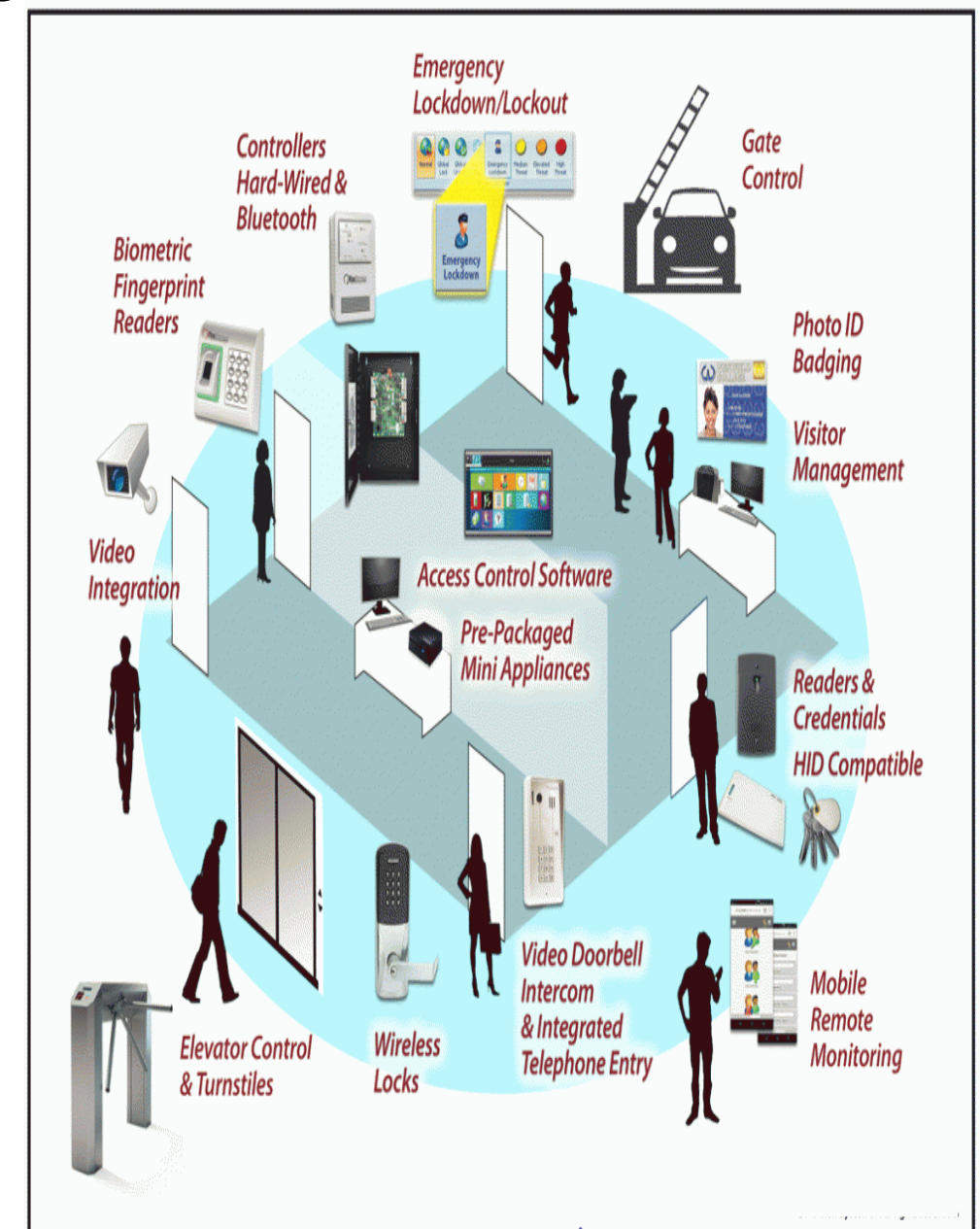
**Deliver**

# **SYSTEMS COVERED:**

- **Integrated Contact Less Access Control System**
- **CCTv Surveillance System**
- **Integrated Intelligent Building Management System**
- **Meeting Room Automation**
- **Facility Team Management**
- **Automated Sanitization Booths**
- **Self Check In Kiosk**
- **Automated Water Dispensing**

# INTEGRATED ACCESS CONTROL SYSTEM

- Access and Time Attendance System for Employees, Facility Team
- Contact Less Parking Management System
- Pedestrian Management System
- Visitor Management System
- Elevator Access Control System
- Contractor On-boarding & Management
- License Plate Recognition System
- Asset Tracking Control
- Key Management System
- Cafeteria Management System





Physical Access  
Control

Alarm  
Management

Biometrics  
Enrollment

Template  
Management

Smart Card  
Printing

Key  
Management

Visitor & Contractor  
Management

Time  
Attendance

Leave  
Management

Asset  
Tracking

Single  
Software

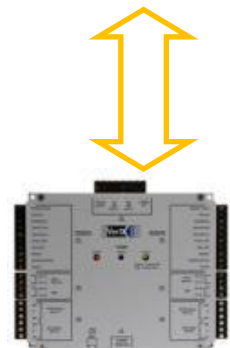
Video  
Management

Video Content  
Analytics

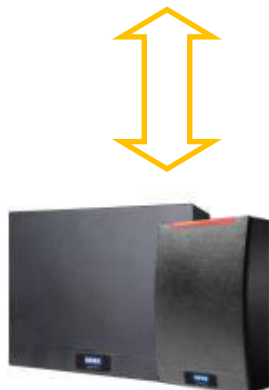
License Plate  
Recognition

Logical Access  
Control

Cafeteria  
Management



Multi-Door  
Controllers



Single Door  
Controllers



Biometric  
Devices



Smart  
Card  
Printers

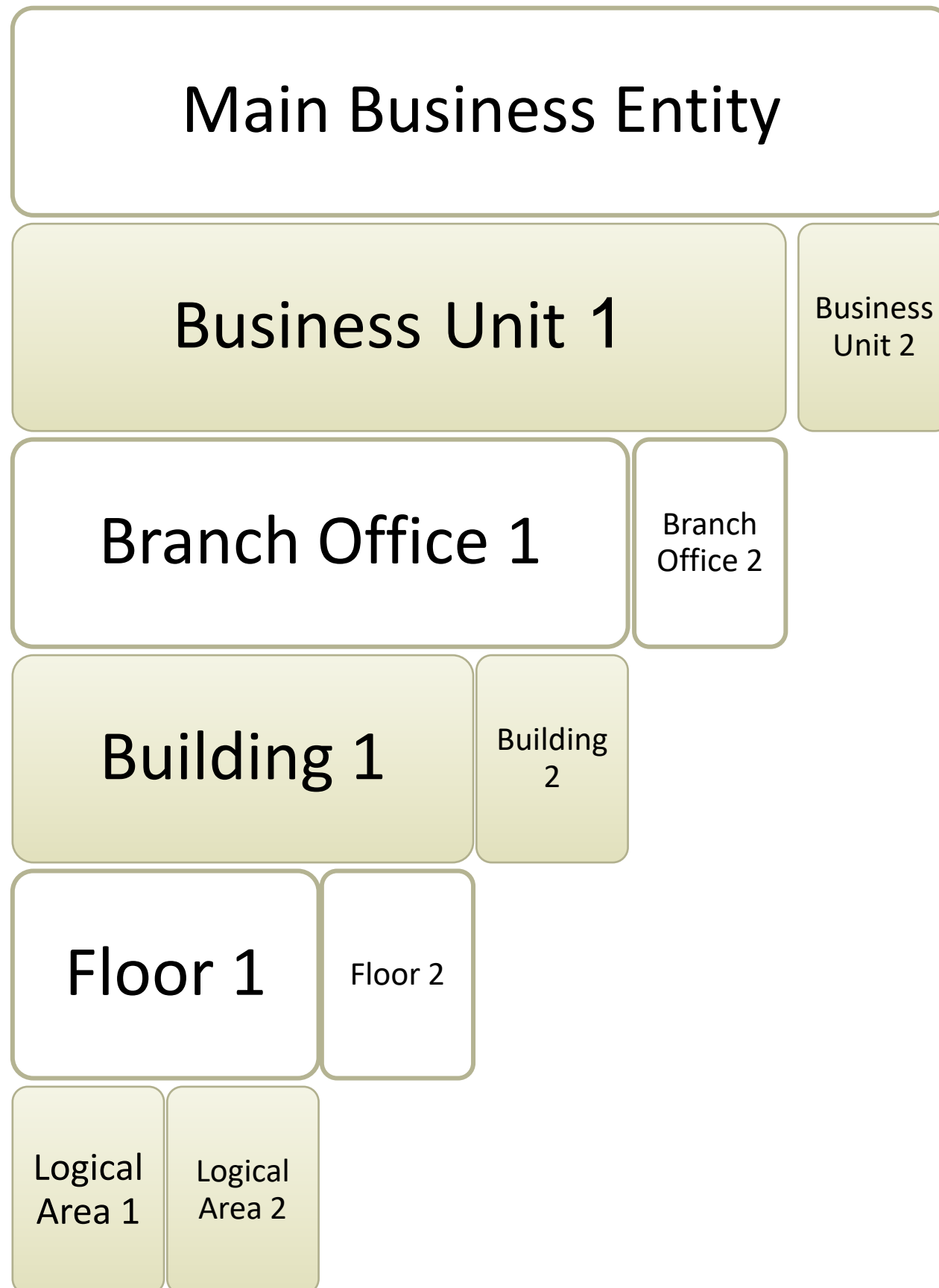


CCTV



Long  
Range  
RFID

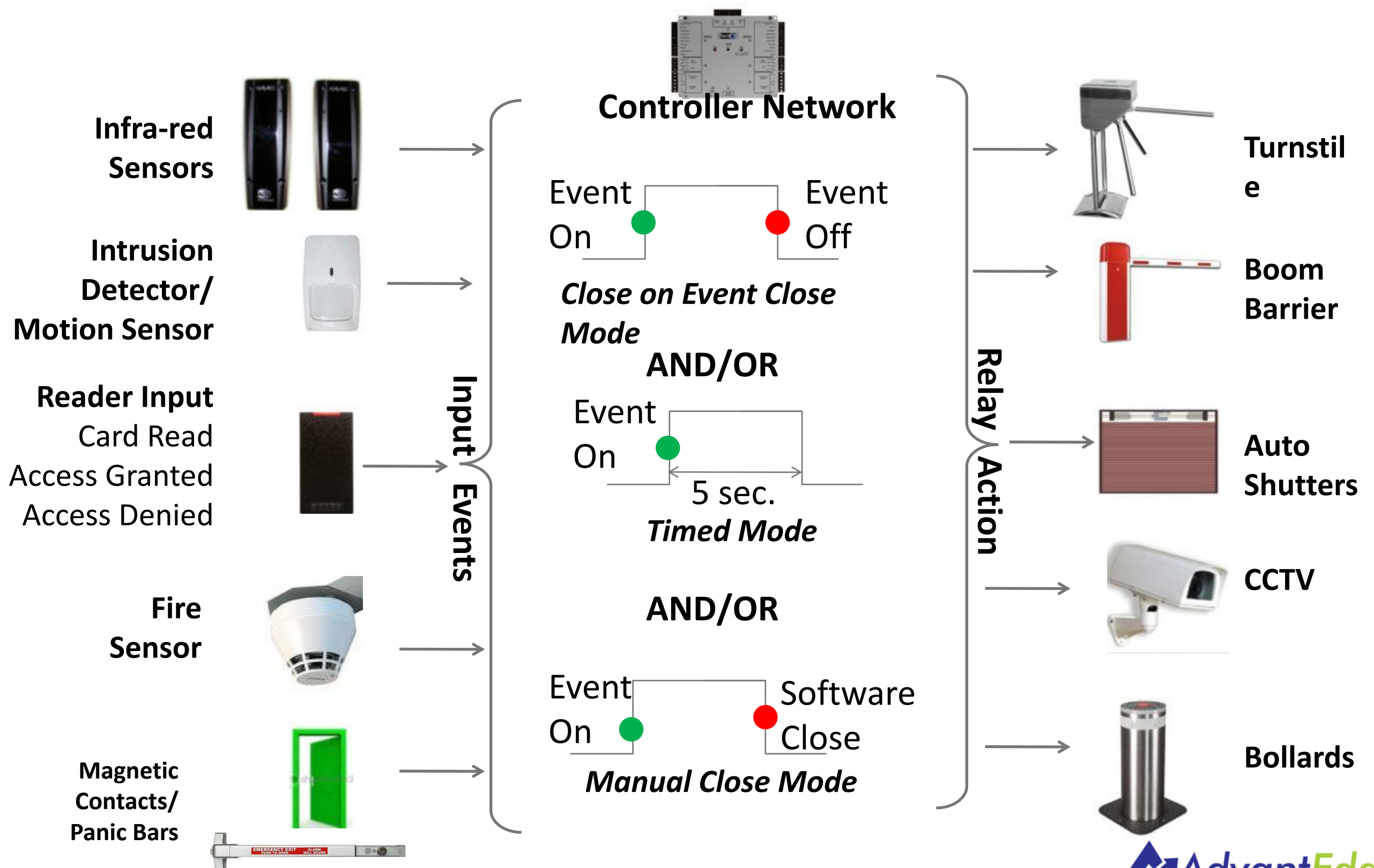
# MANAGING BUSINESS ENTITIES



- **Web Based Service Oriented Architecture (SOA)**
- **Multi Tenant** -Application allows to configure Multiple Business entities coexisting in a facility having common and private areas such as Business Parks, Malls, SEZ(Special Economic Zone)
- Complete confidentiality of information among Business entities.
- **Multi Facility**-The application acts as a centralized Access Management application across multiple global facilities & Business entities.
- Facilitates Access rights sharing & Workflows, Reporting Privileges across facilities



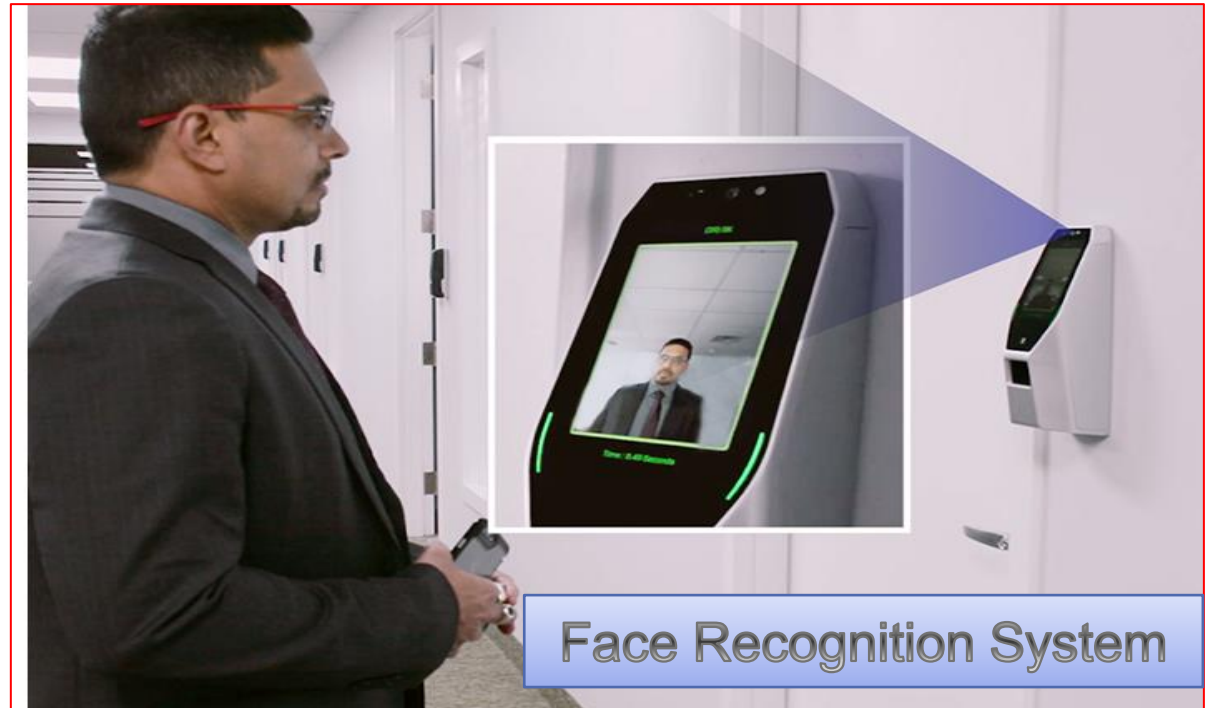
# ACCESS CONTROL (LOGICAL DEVICE CONTROL)



# CONTACT LESS ACCESS CREDENTIALS



TOUCHLESS FINGERPRINT  
TERMINAL



Face Recognition System



Mobile Credentials

FACE MASK  
DETECTION





# MOBILE BASED ACCESS CONTROL SYSTEM

## Mobile Credential



# AUTOMATIC SLIDING DOOR



- Touch Less Entry & Exit
- Can be Integrated with Access Control System
- Sensor Based Exit

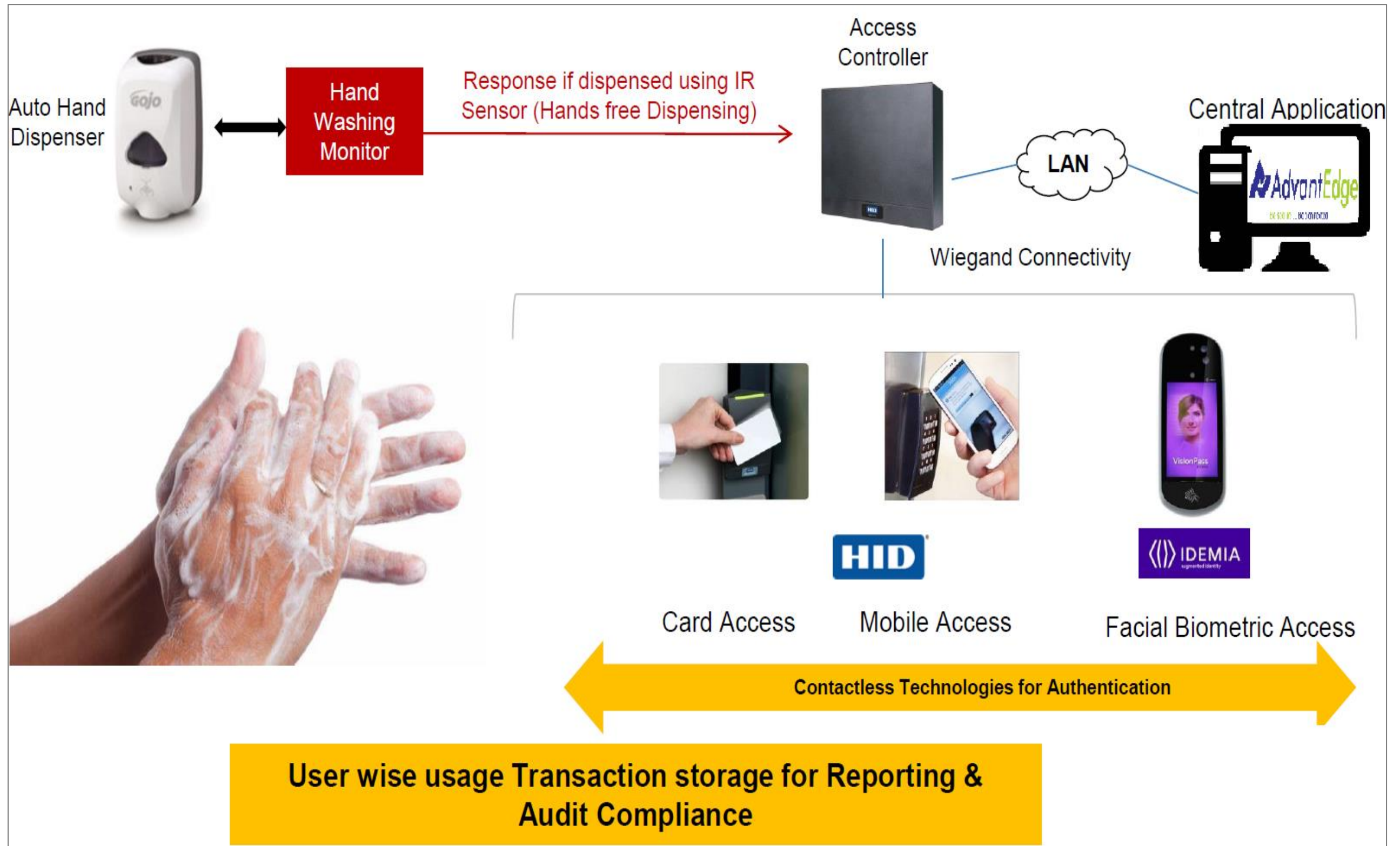
# TOUCH FREE EXIT SWITCH



- 4 Wire System
- Compatible with Any Access Control System
- Touch Less Exit for Visitors

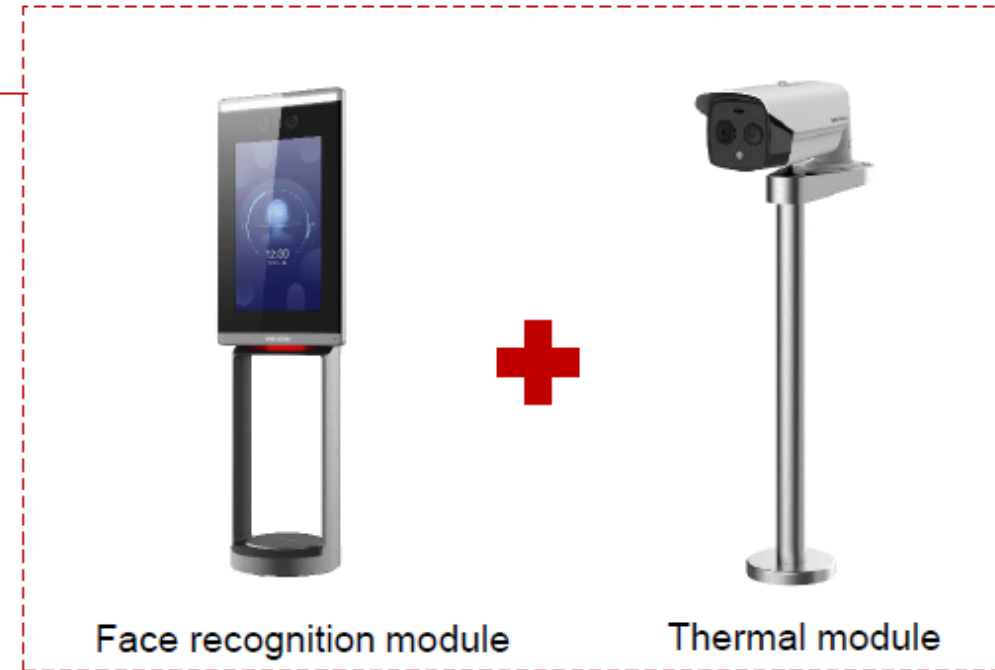


# ACCESS CONTROL BASED SANITIZER USAGE FOR 100% COMPLIANCE



# PEDESTRIAN MANAGEMENT SYSTEM

## Barrier Gate & Fever Screening Solution



### Key Features:

- 7-inch touch screen
- Face capacity: 20,000
- Temperature range: 30~45°C
- Temperature accuracy:  $\pm 0.5^{\circ}\text{C}$
- Scenarios: enterprise, schools, factories, etc.



Face recognition & body temperature measurement



Non-contact fast body temperature measurement (face detection)



Real-time alarm



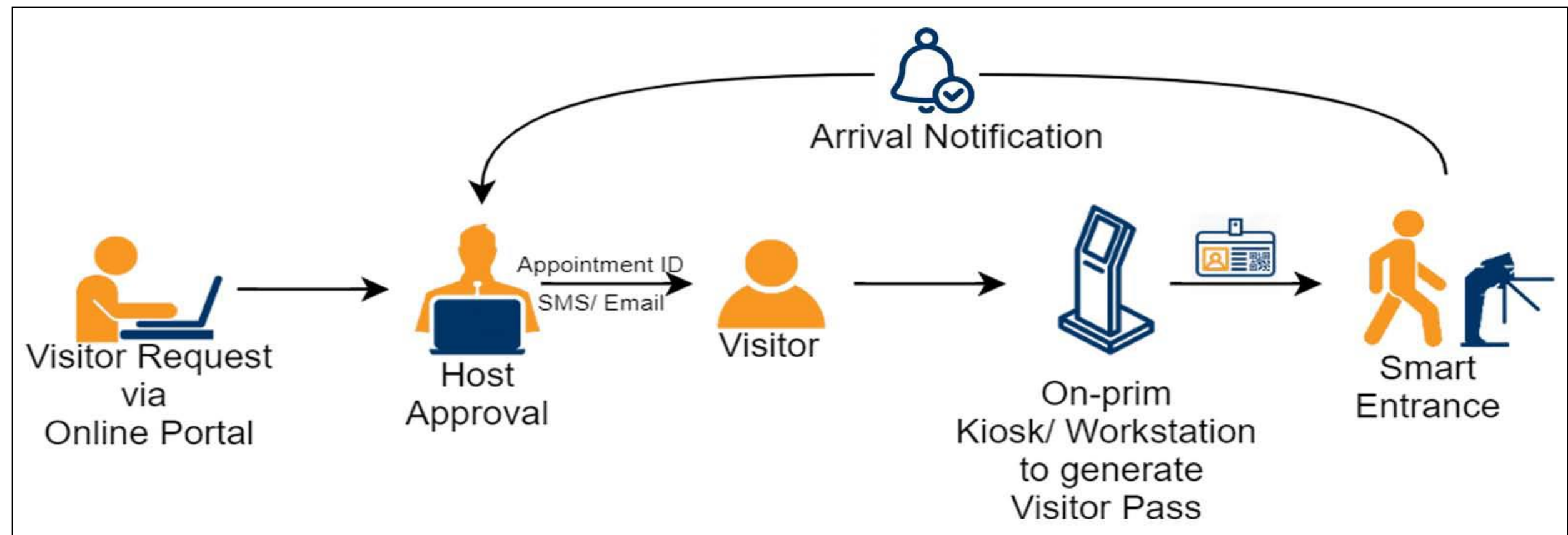
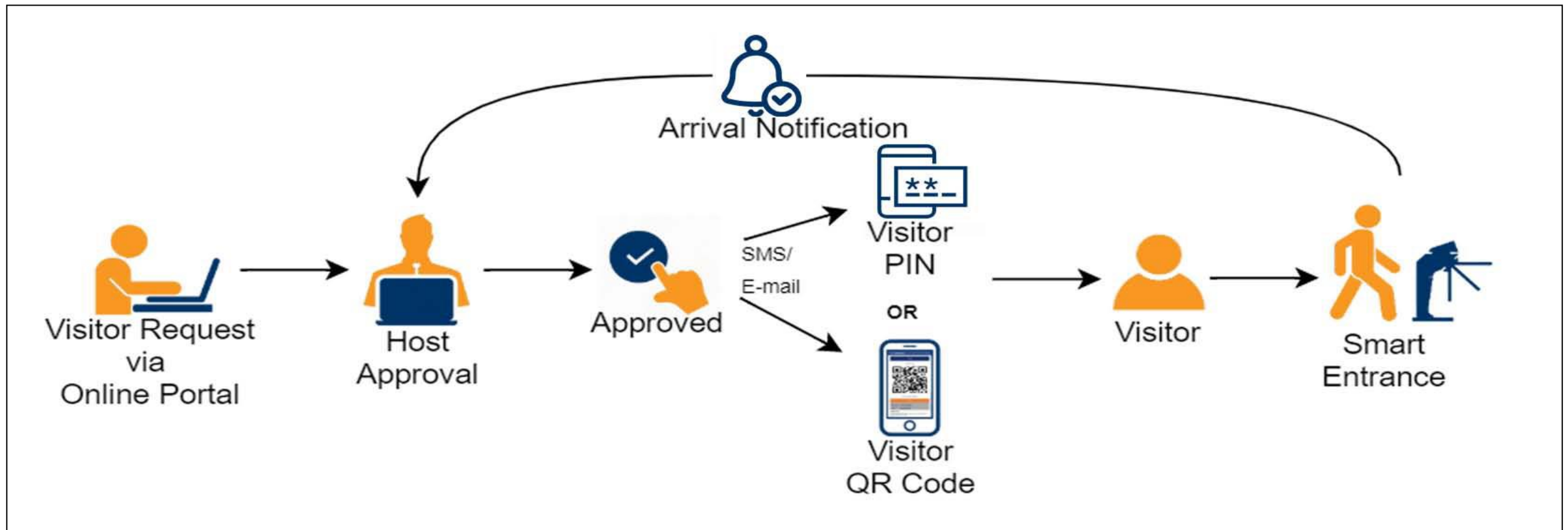
Easy to deploy



# VISITOR MANAGEMENT

- **Visitor Policy Management(Define Visitor Policies and Procedures)**
- **Design Your Pass**
- **Visitor Pre-registration**
- **Validate Visitor (Visitor Approval)**
- **Visitor Notification**
- **Integrated Access Control**
- **Track Visitors**
- **Elevator Connect**
- **Asset Pass**
- **Self Service (Kiosk Mode)**
- **Contractor Pass & Management**

# VISITOR MANAGEMENT

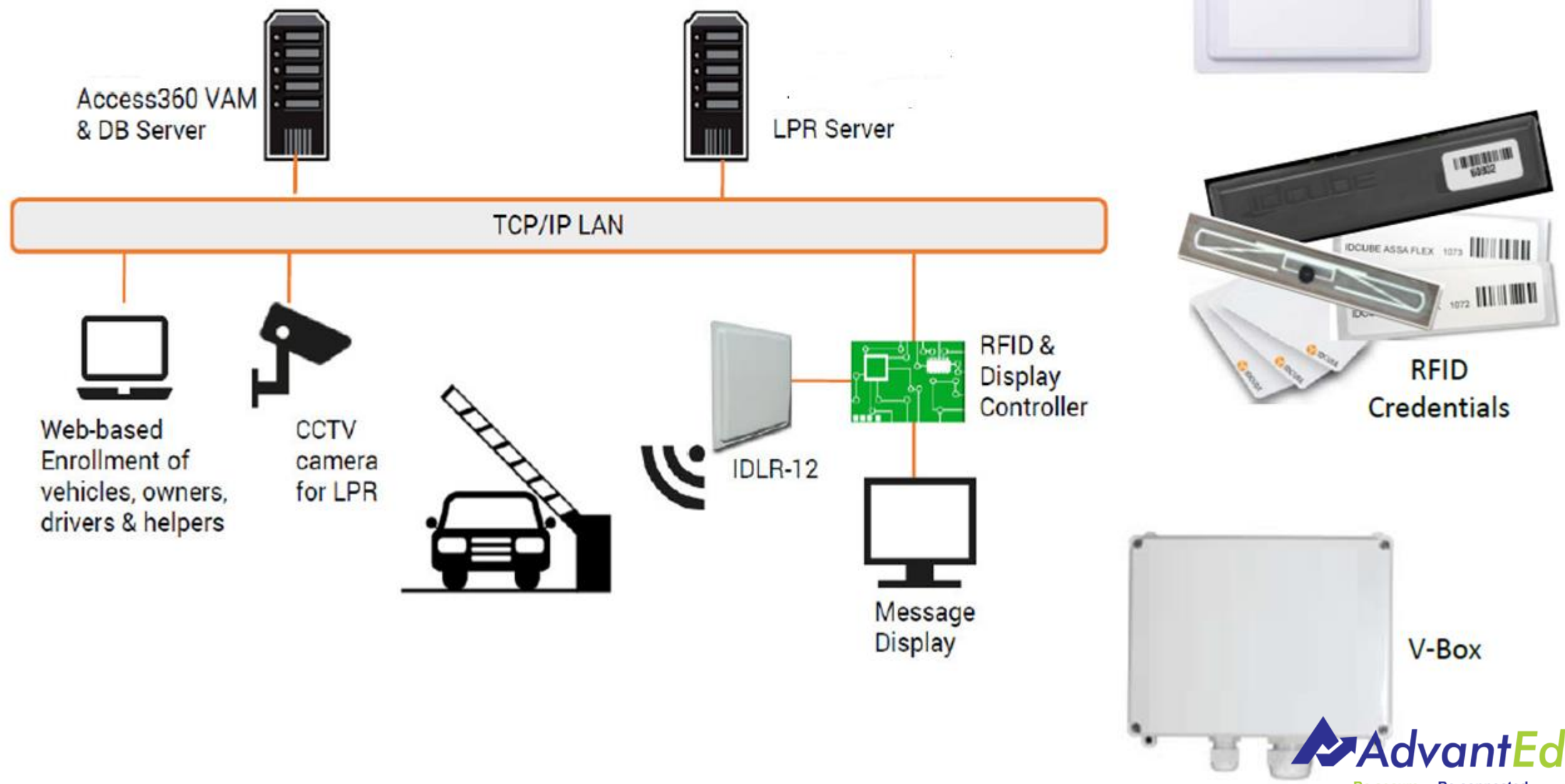


# VEHICLE MANAGEMENT SYSTEM

## Vehicle Access Management

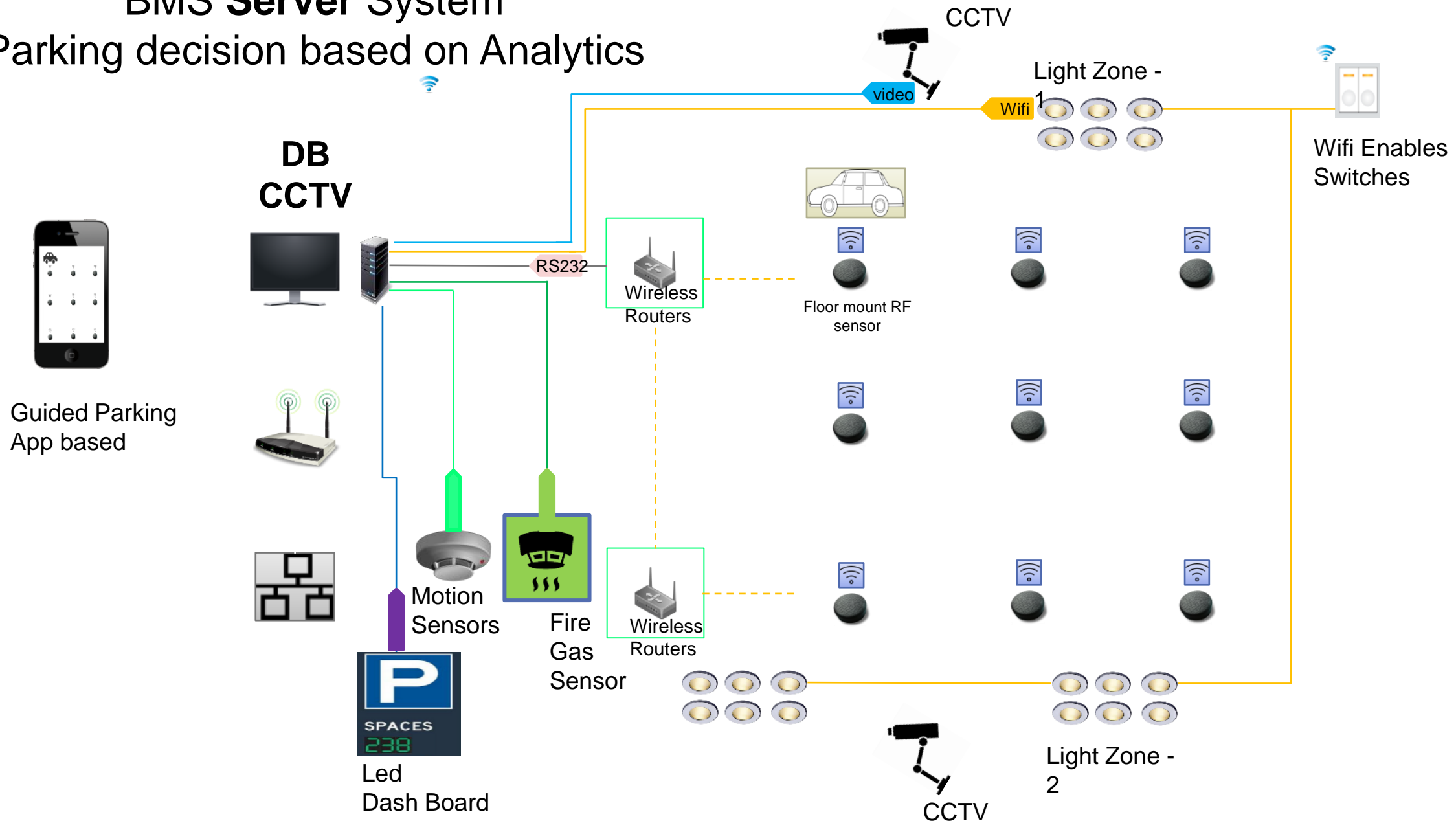
1. Vehicle Access
2. Occupancy Control
3. LPR/ANPR
4. Parking Space Availability Display

4. RFID Long Range Readers
5. Tamper Proof Tags
6. Industrial RFID Credentials
7. VBOX (Standalone Controller)



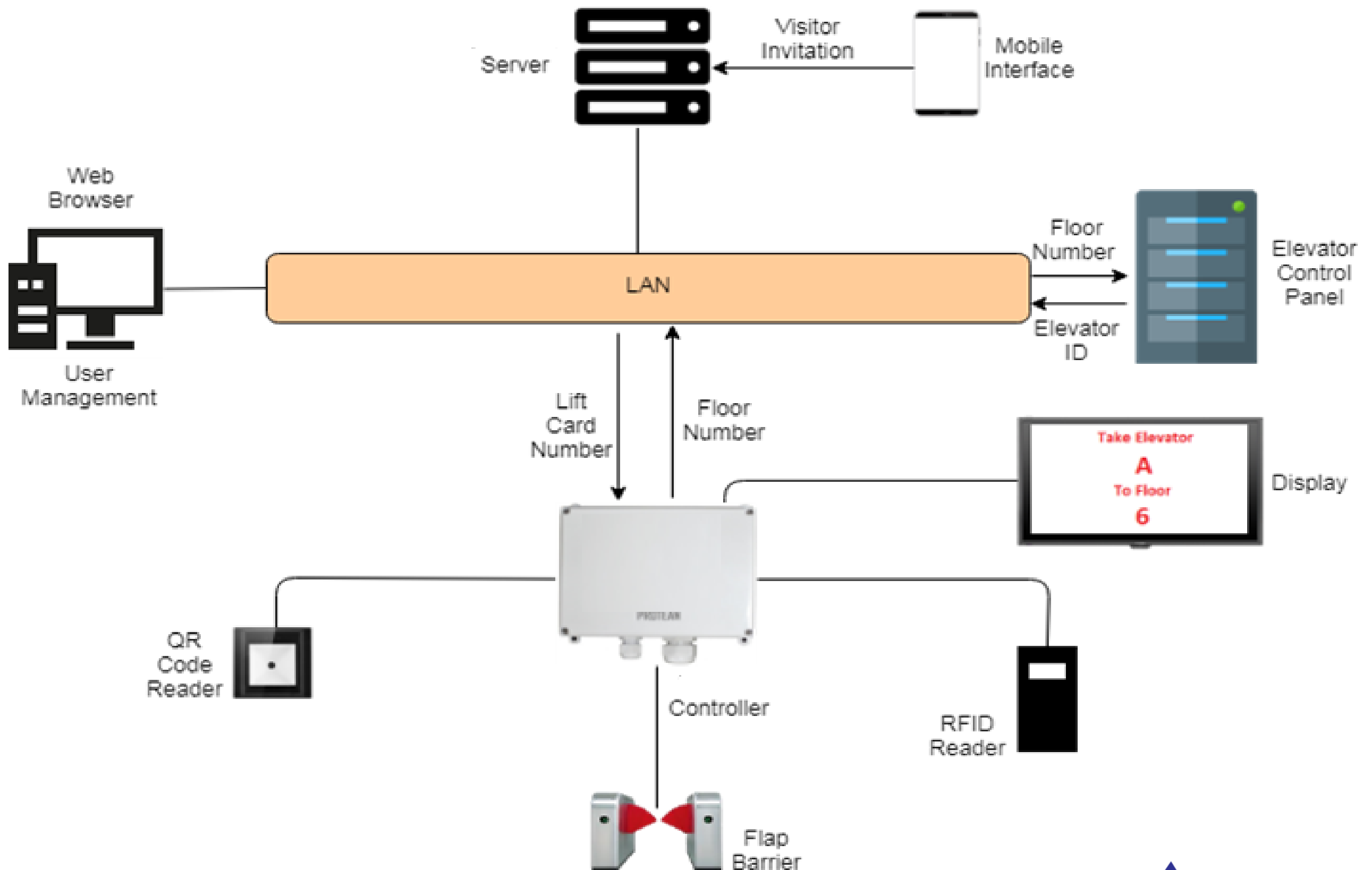
# PARKING AUTOMATION SYSTEM

## BMS Server System Parking decision based on Analytics



- 2.4GHz 60/100m transmit range
- Mesh networks
- Connect up to 500 sensors
- -40~85°C work temperature

# ELEVATOR ACCESS SYSTEM





# FOOD COURT & CAFETERIA MANAGEMENT

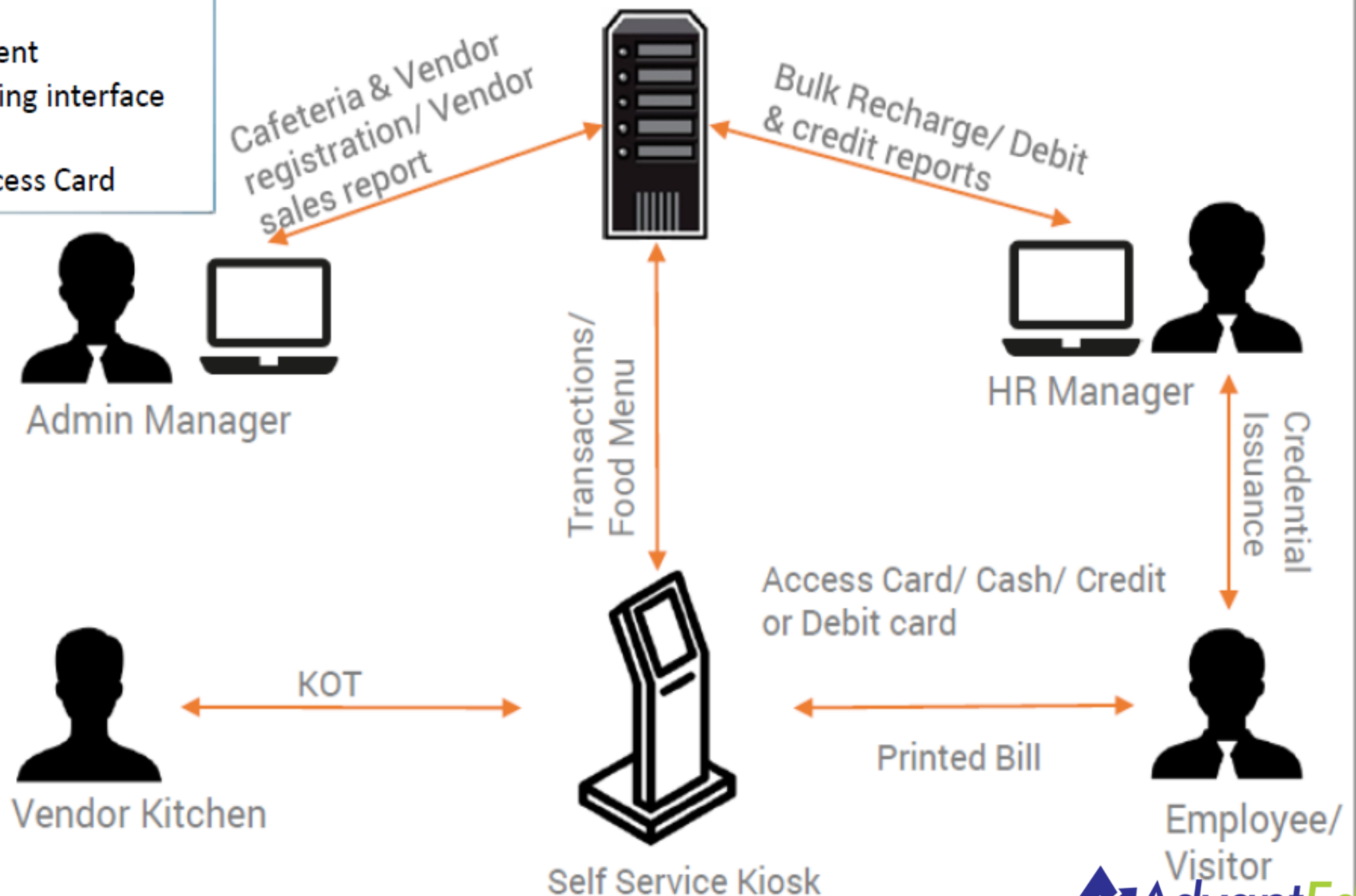
- **Multiple food-shops & vendor Management**
- **Touch Screen POS Terminals**
- **Design your bill**
- **Centralized Recharge/Refund Stations**
- **Flexible payment options for corporate Buyers**
- **Comprehensive Single Click reporting interface**
- **Web-based Employee expense reports for corporate buyers**



# FOOD COURT & CAFETERIA MANAGEMENT

## Cafeteria Mgt. Solution

1. Cashless experience
2. Self service kiosks
3. Vendor management
4. Single Click reporting interface
5. Design your bill
6. Use Corporate Access Card



# VIDEO ANALYTICS

Equipped to operate in wide range of surveillance situations involving people, vehicles & other objects.

Set multiple overlapping detection zones and lines

Rapid 'learning time' of just two seconds

Supports following Analytics:

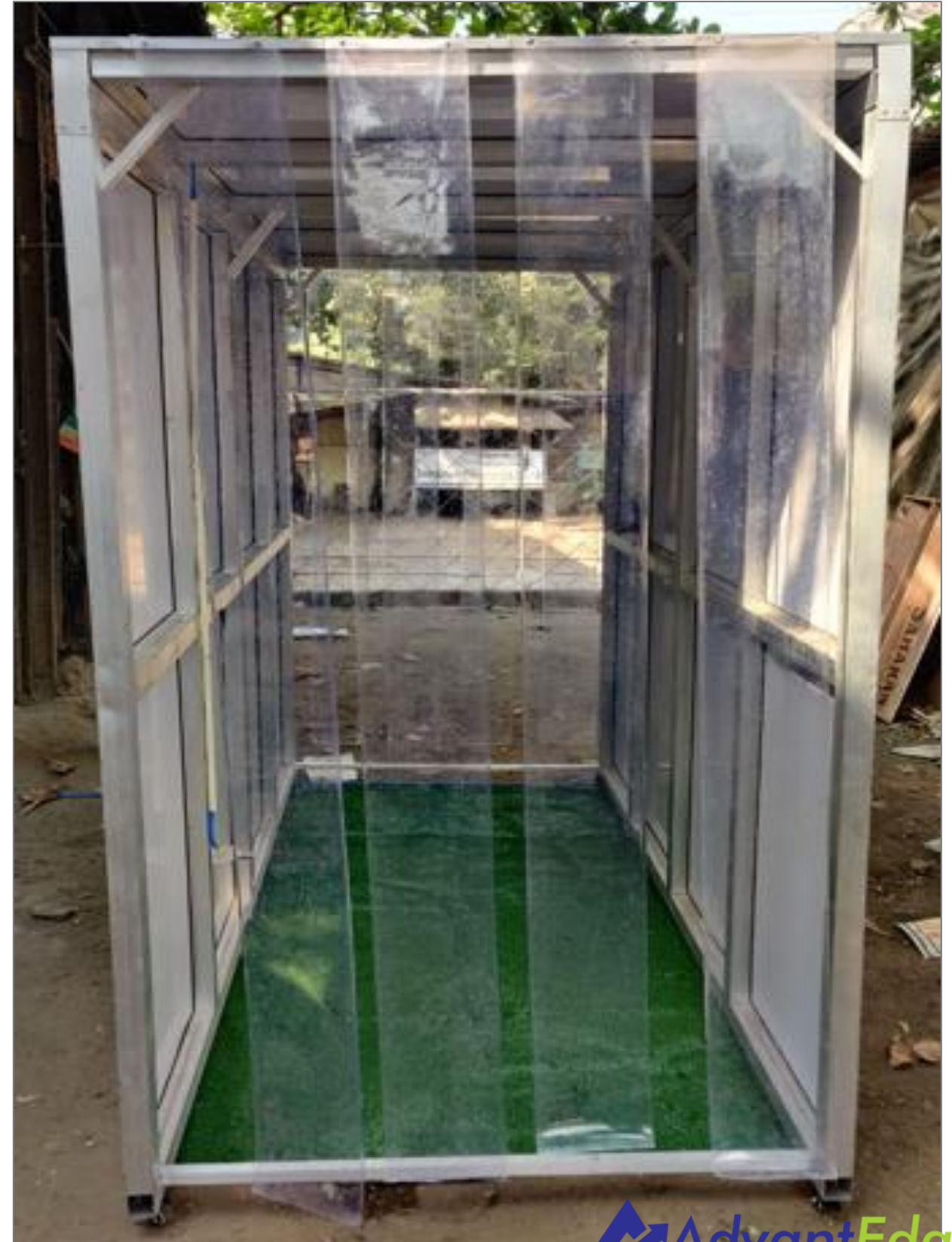
- Tamper detect
- Surveillance tracker
- Presence filter,
- Enter/Exit
- Appear/Disappear
- Stopped filters
- Class and speed filters + calibration
- Direction & dwell filters
- Tail-gating filter
- Abandoned object filter
- On-screen counters
- Object Meta data
- Counting Line



# **AUTOMATED SANITIZATION BOOTHS**



# FULLY AUTOMATED MECHANISM COMPLETE WITH ALL FITTINGS & ACCESSORIES & COMPONENTS





# **THERMAL SCREENING & FACE MASK DETECTION SYSTEM SOLUTION**

# SELF CHECK KIOSK

## PURPOSE

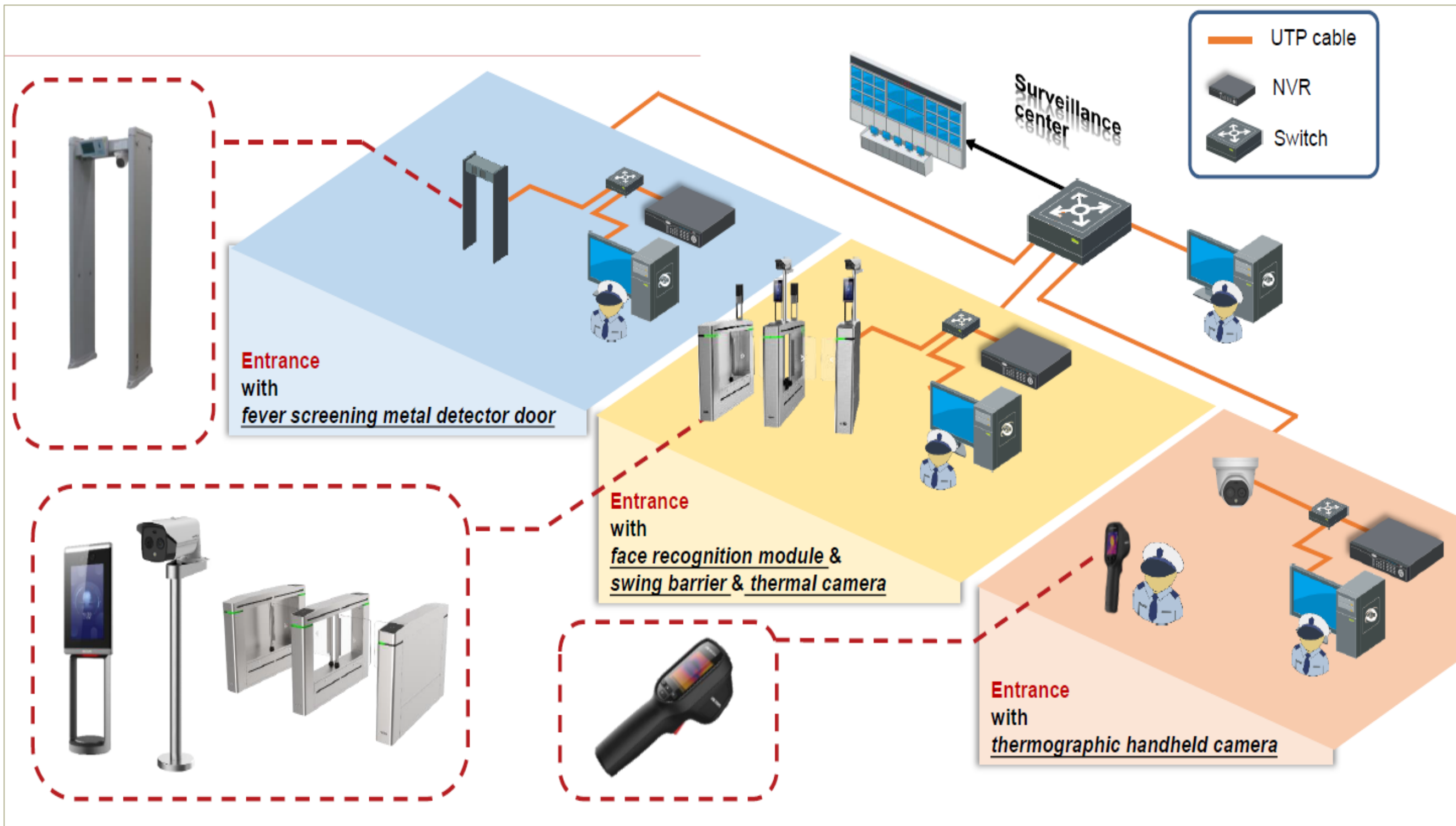
Early recognition and management of COVID-19

### 4 Quick Precautions

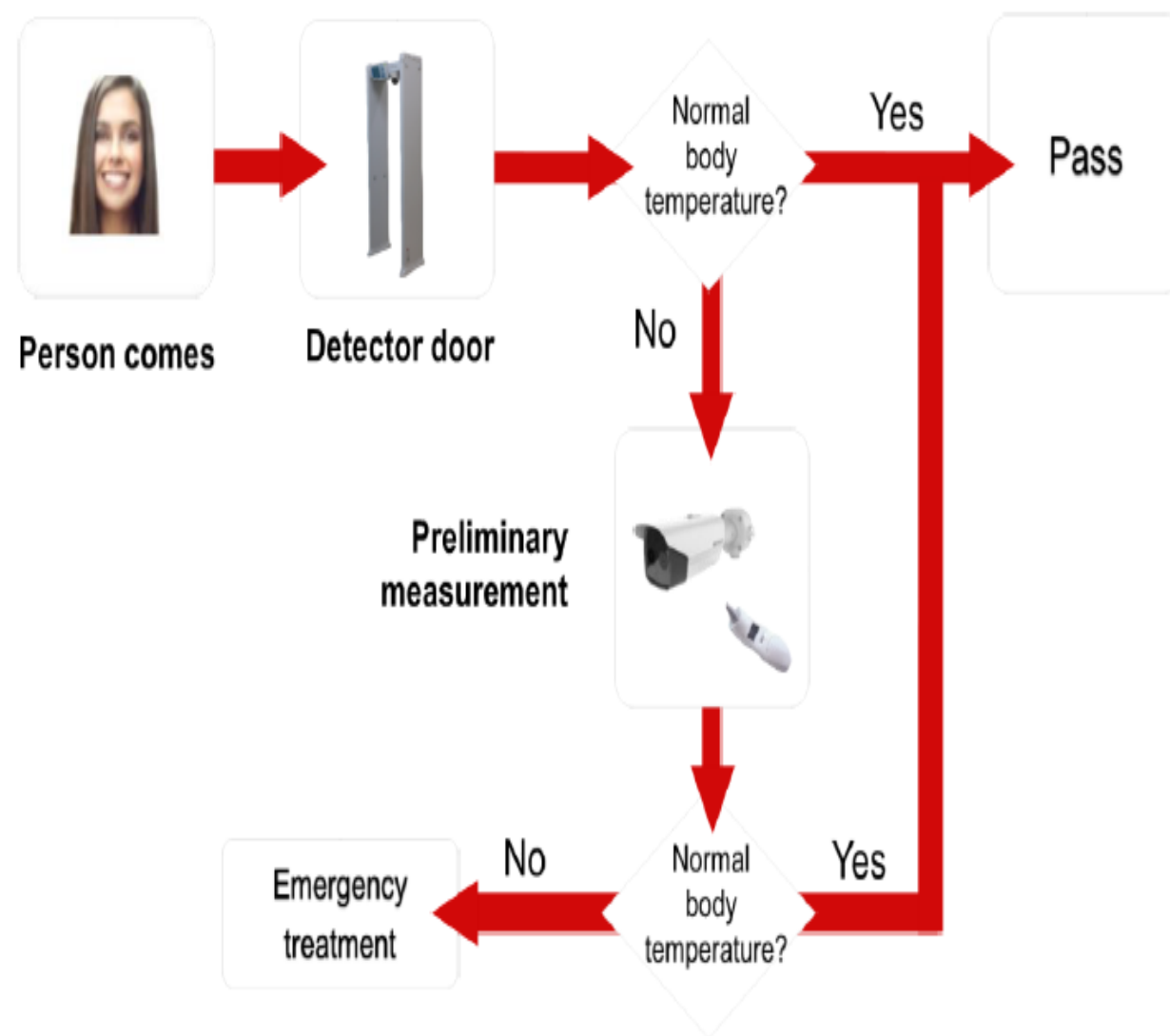
- ▶ **Detects Fever** —————  
High Fever indicates syndromes associated with COVID-19
- ▶ **Checks Oxygen levels (SpO2)** —————  
Oxygen level below 90% indicates syndromes associated with COVID-19
- ▶ **Touch-less Hand Sanitizer** —————  
Decreases the risk of getting sick and spread of Virus
- ▶ **Disinfection Chamber for Bag, Mobile, Keys etc. by UV-C** —————  
UV-C kills 99% Virus in 10 seconds thus reducing the spread
- ▶ **The Solution displays and records all data at a single location**



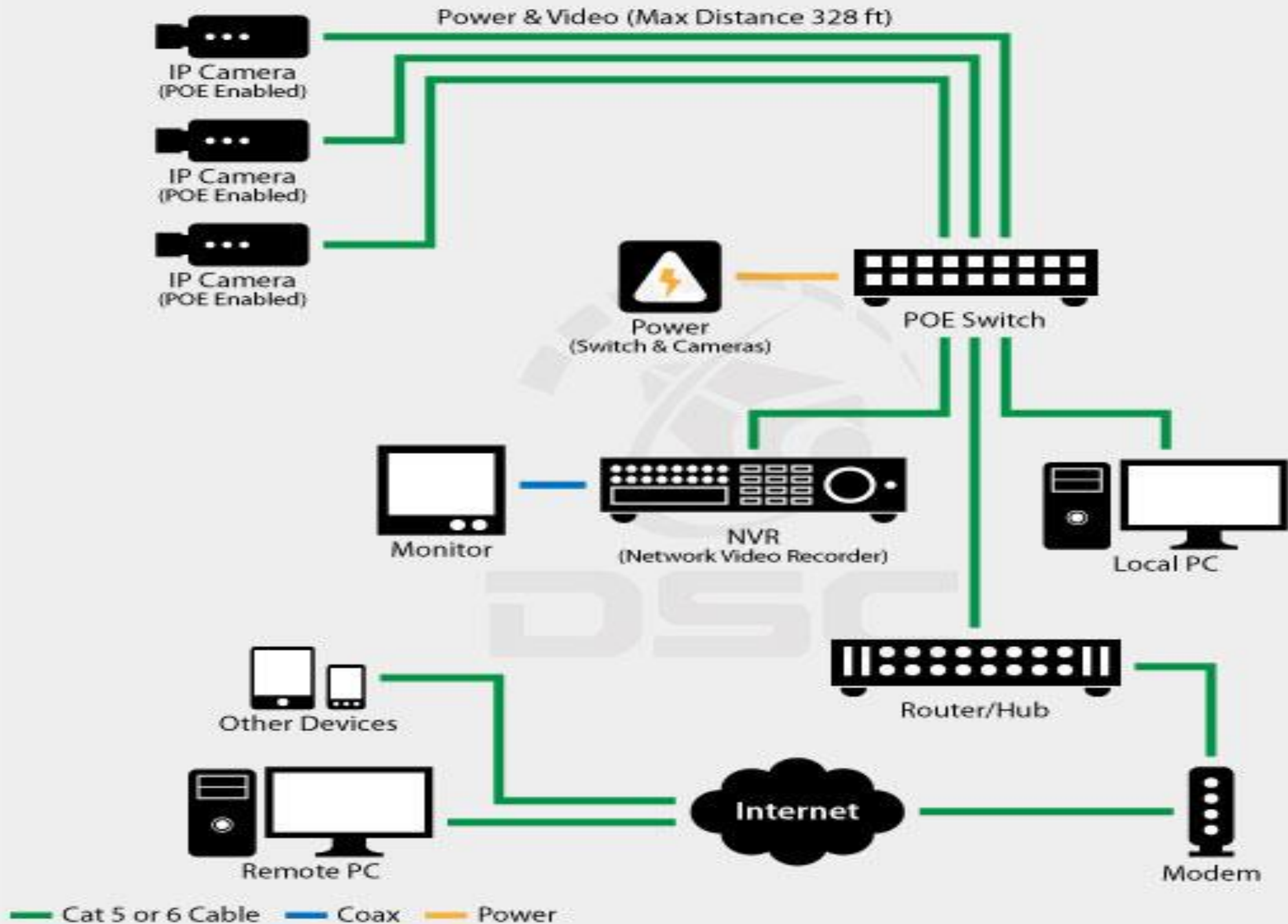
# MULTIPLE SOLUTIONS



## Working flow & results display



# IP CCTV SOLUTION

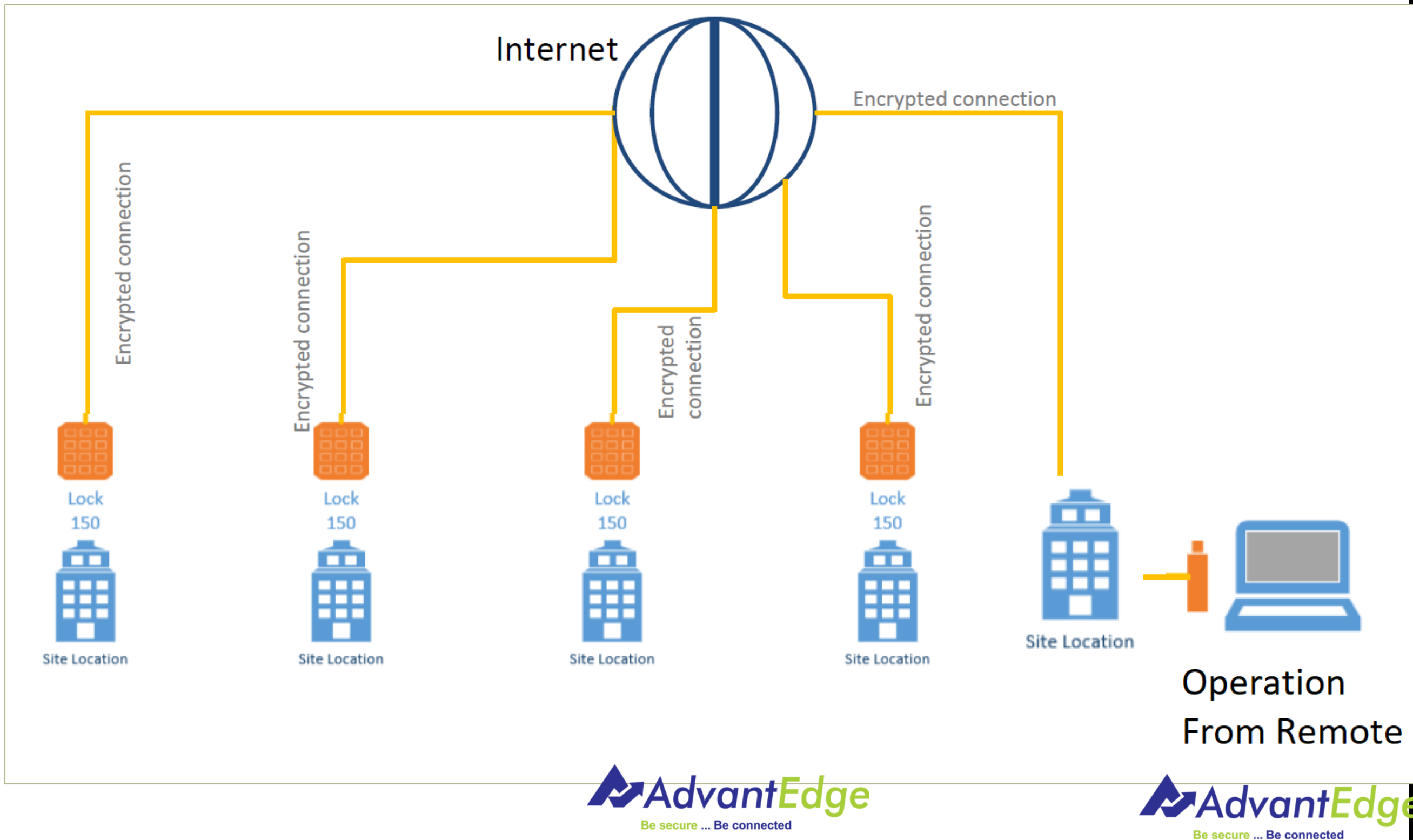




# COMMAND CENTER

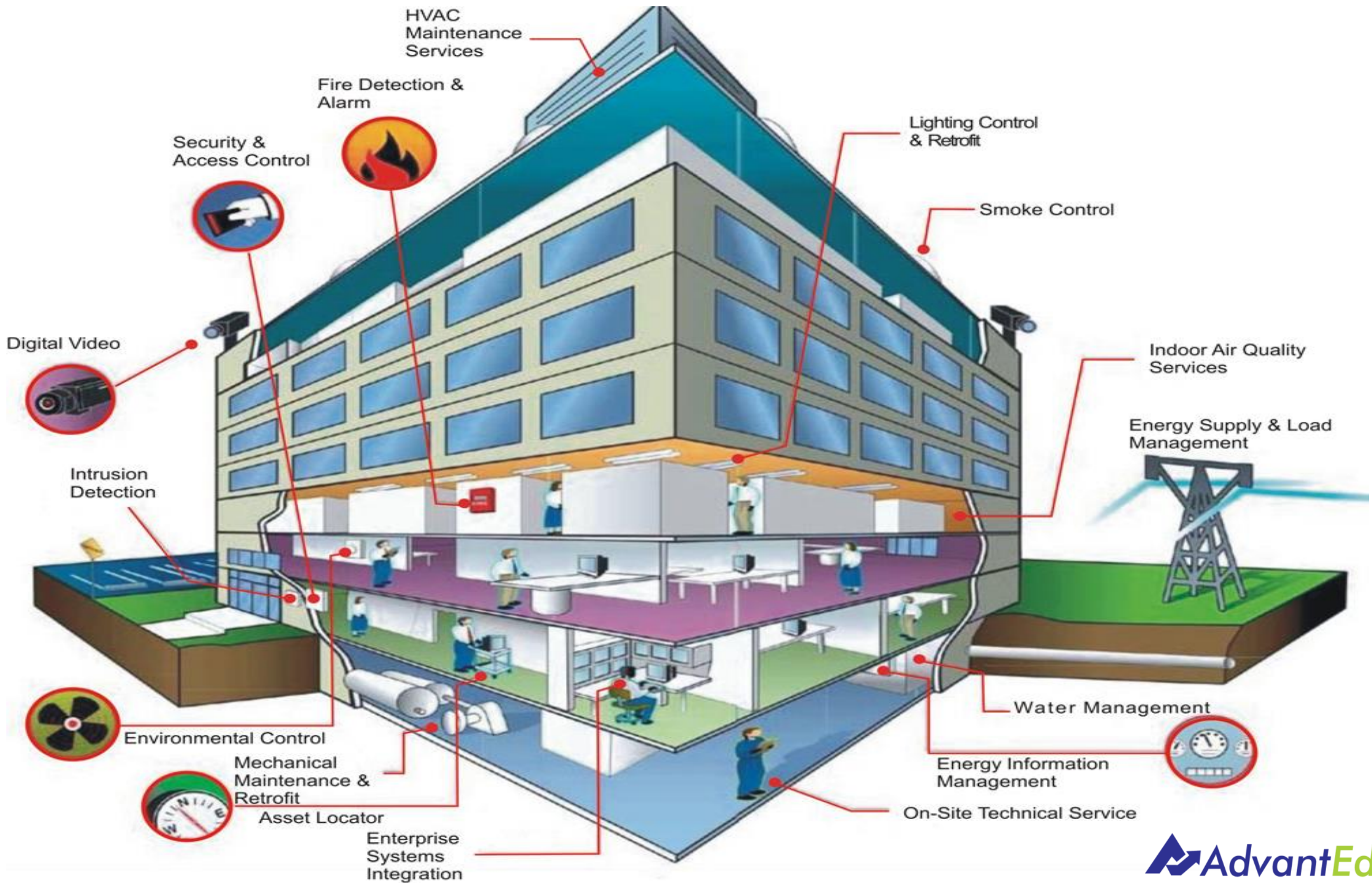


# BMS SOFTWARE AT EACH LOCATION FOR REMOTE MONITORING & CONTROL WITH DATA ENCRYPTION

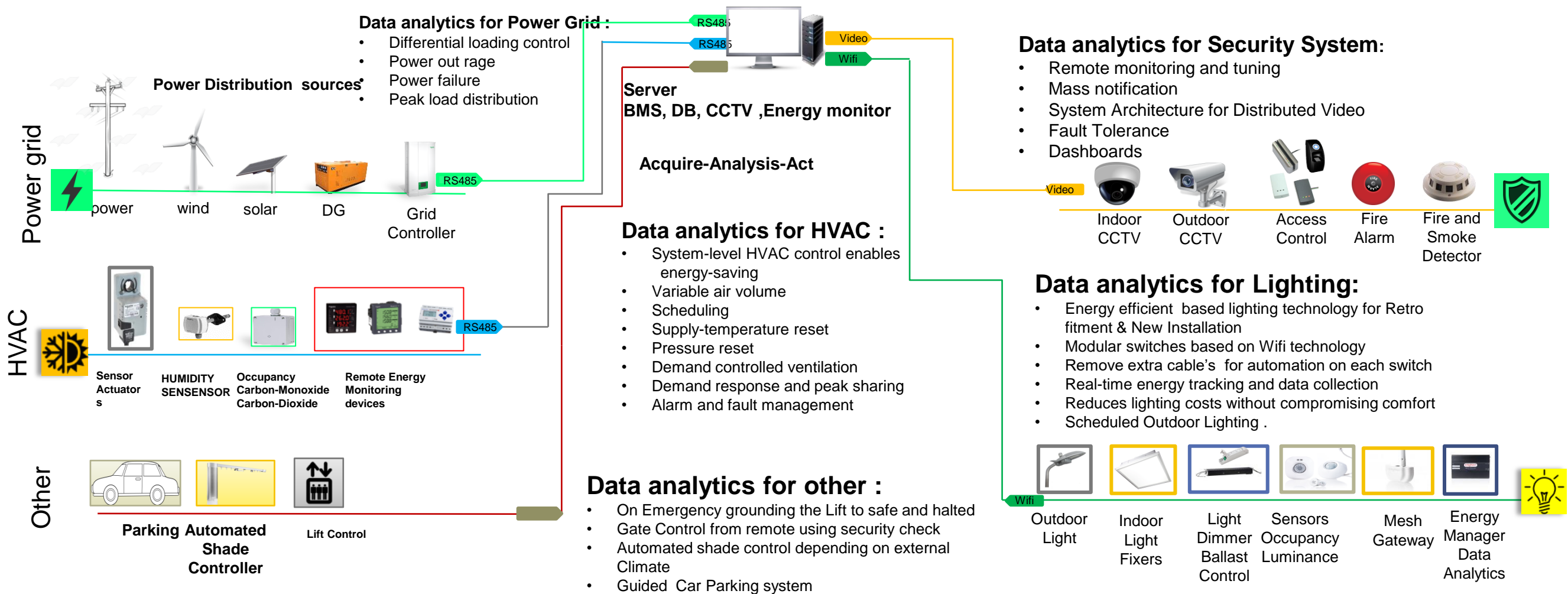




# TYPICAL BMS ARCHITECTURE



# SMART CAMPUS SOLUTION





# **SYSTEM UNDER BMS:**

- **Electrical Systems**
- **Energy Meters**
- **Elevator Management System**
- **Fire Alarm Panel**
- **Fire Hydrant & Sprinkler System**
- **Fire Curtains & Barriers**
- **Gas Suppression System for IT rooms, UPS & Battery rooms**
- **Handheld Fire extinguishers**
- **HVAC**
- **Indoor Air quality monitoring**
- **Lighting Control**
- **Smoke Control and Ventilation**
- **Water Management**
- **UPS**

# Building Management System

Security System

Safety System

Elevator  
Management

Water Management

Utilities

Electrical System

HVAC Management

# HVAC MANAGEMENT

BTU meter

Fans

Temp, RH, CO2 and  
Pressure sensor

PAC

VRV

Cassette unit

AHU

VFD

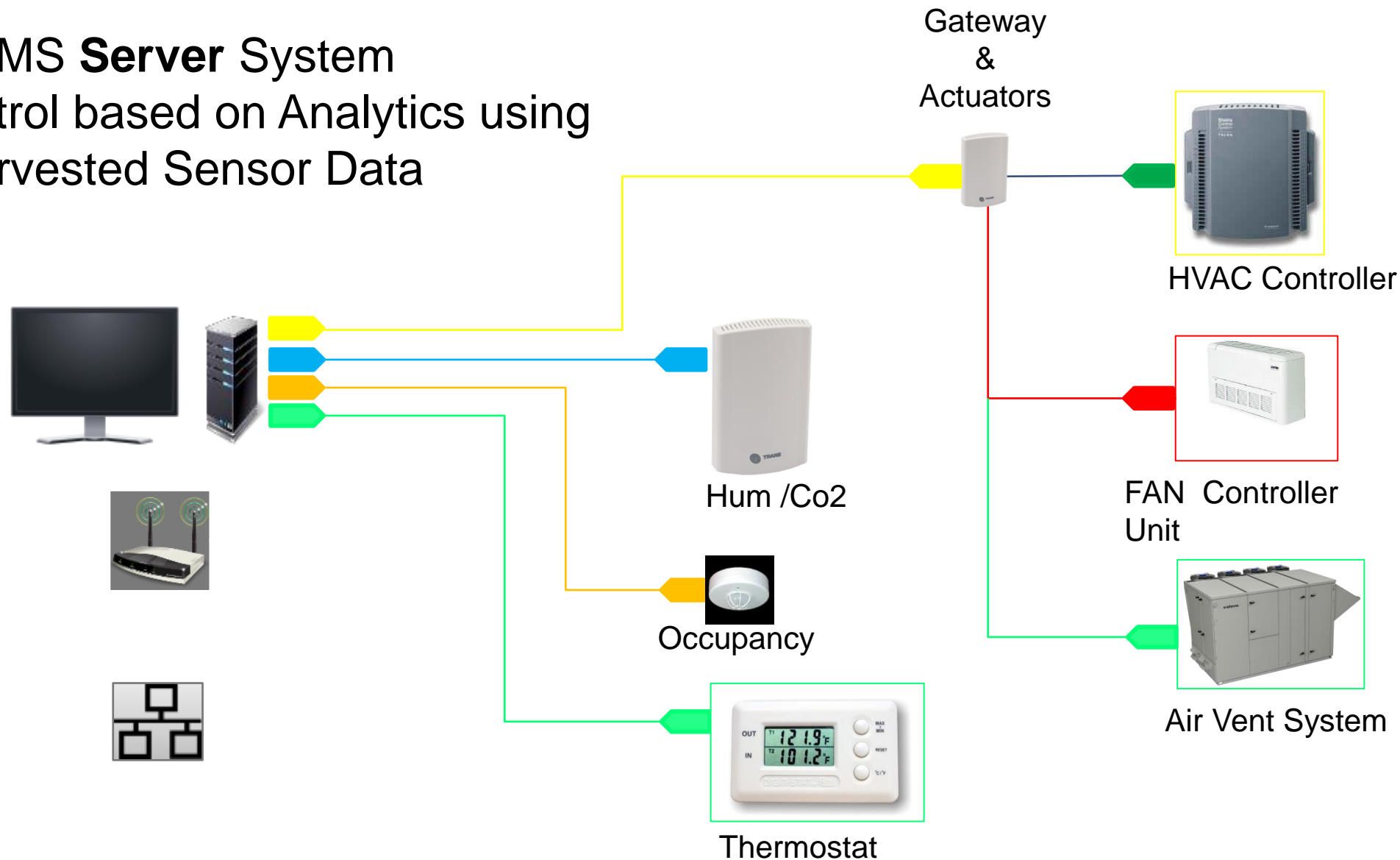
VAV

Chillers

Cooling Towers

# HVAC

## BMS Server System HVAC Control based on Analytics using Harvested Sensor Data



Energy saving over HVAC energy efficient

- 15% Cost savings in new construction
- 30% Cost savings in retrofits
- 40% energy savings
- Unlimited Flexibility



# INDOOR AIR QUALITY CONTROL

**There are three basic strategies to improve indoor air quality:**

- **Source Control**

**Usually the most effective way to improve indoor air quality is to eliminate individual sources of pollution or to reduce their emissions.**

- **Improved Ventilation**

**Another approach to lowering the concentrations of indoor air pollutants is to increase the amount of outdoor air coming indoors.**

- **Air cleaners**

**The effectiveness of an air cleaner depends on how well it collects pollutants from indoor air (expressed as a percentage efficiency rate) and how much air it draws through the cleaning or filtering element (expressed in cubic feet per minute).**

# ELECTRICAL SYSTEMS + UTILITY

Air Compressor

Lighting System

Diesel Generator

Billing and Metering

UPS Monitoring

Transformer

LT panels

HT panels

# WATER MANAGEMENT PUMPS

Waste water  
treatment pump

Hydro pneumatic  
pumps

ETP Pumps

STP Pumps

# Fire Alarm Panels Monitoring

Capture data from Conventional or Analogue Addressable Panels

- Zone or smoke detectors status
- Input/output device status
- Battery health



Conventional Panel



Addressable Panel



# Water Sprinkler System Monitoring

1. Stop Valve, Alarm Valve, Alarm Test Valve
2. Pressure Switch
3. Pressure Gauge
4. Flow Switches
5. Jockey pump
6. Main pump
7. Water Level
8. Alarm Test Valve Control for automatic periodic testing of the system

# Fire Extinguisher Monitoring

1. Extinguisher pressure reading
2. Extinguisher location
3. Extinguisher removal
4. Extinguisher accessibility/Monitor For Obstruction



Pressure reading



Extinguisher removal sensor



Extinguisher accessibility/

# Fire Suppression System Monitoring

Capture data from Fire Suppression System

- Zone Status – Cross Zoning
- Output Status – Release Valve, agent activation
- Gas pressure monitoring



Fire Suppression Panel



Control Valve

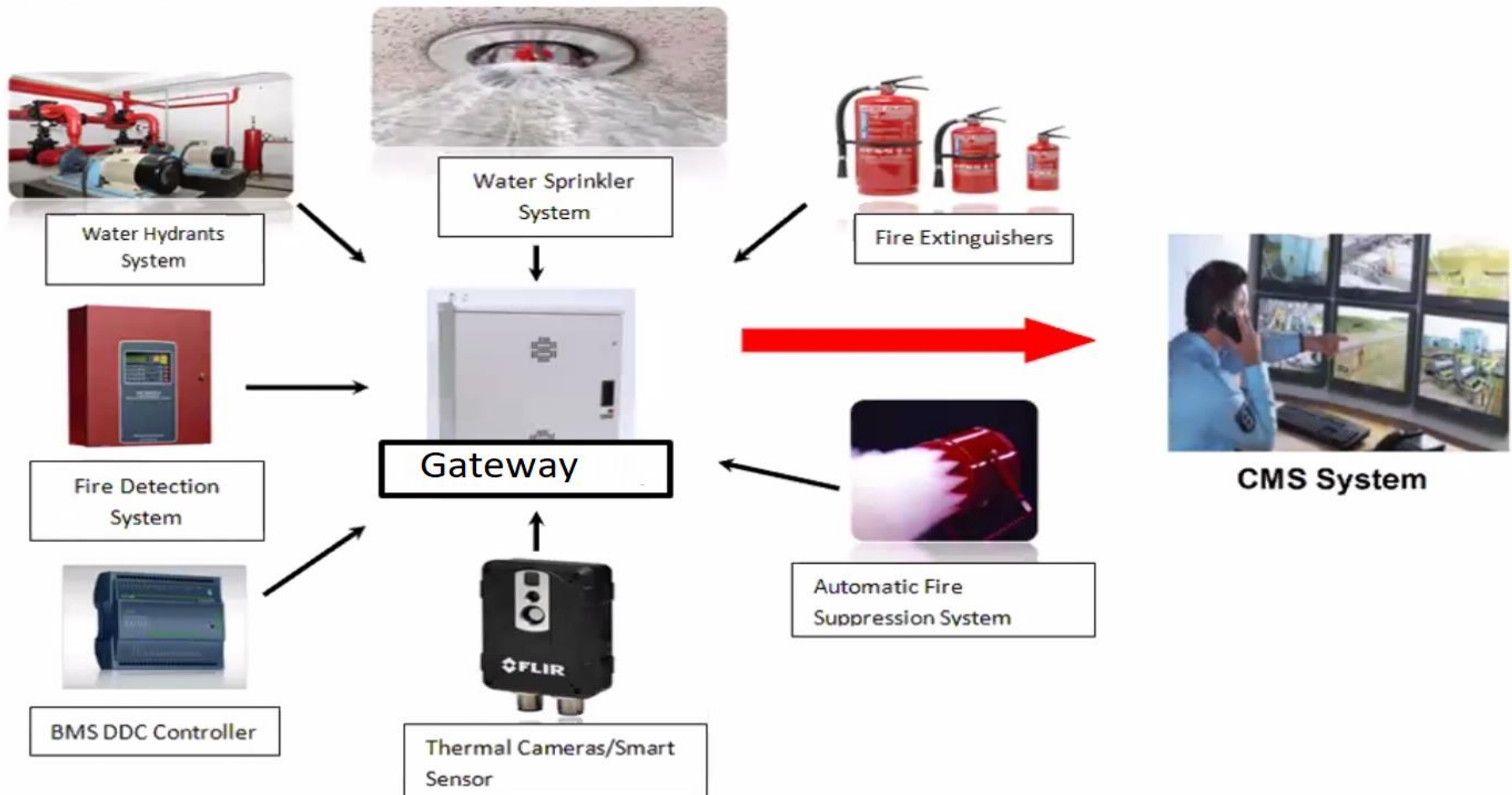


FM200 Gas Cylinders



# CENTRAL MONITORING

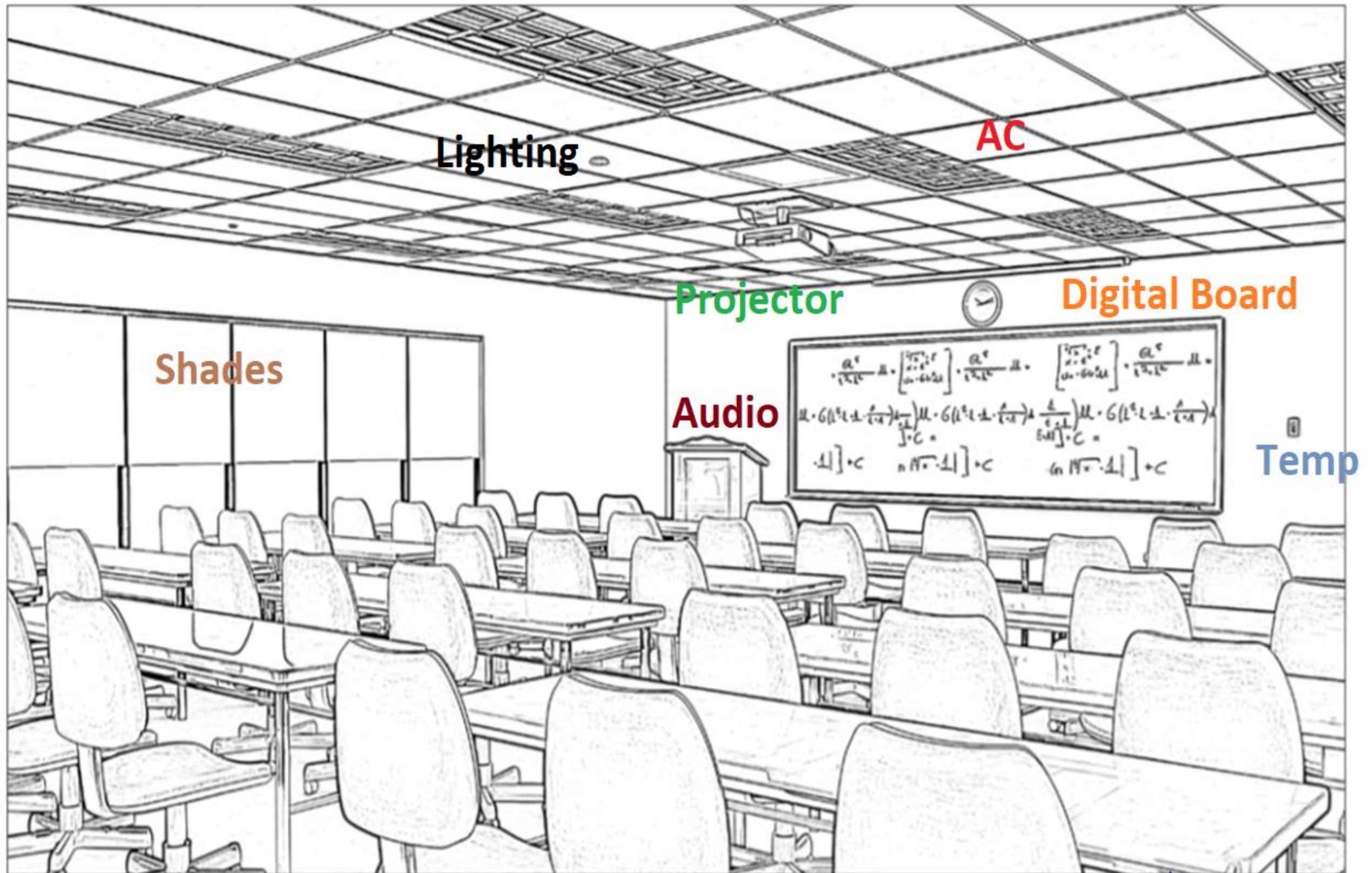
## Central Monitoring Station (CMS)



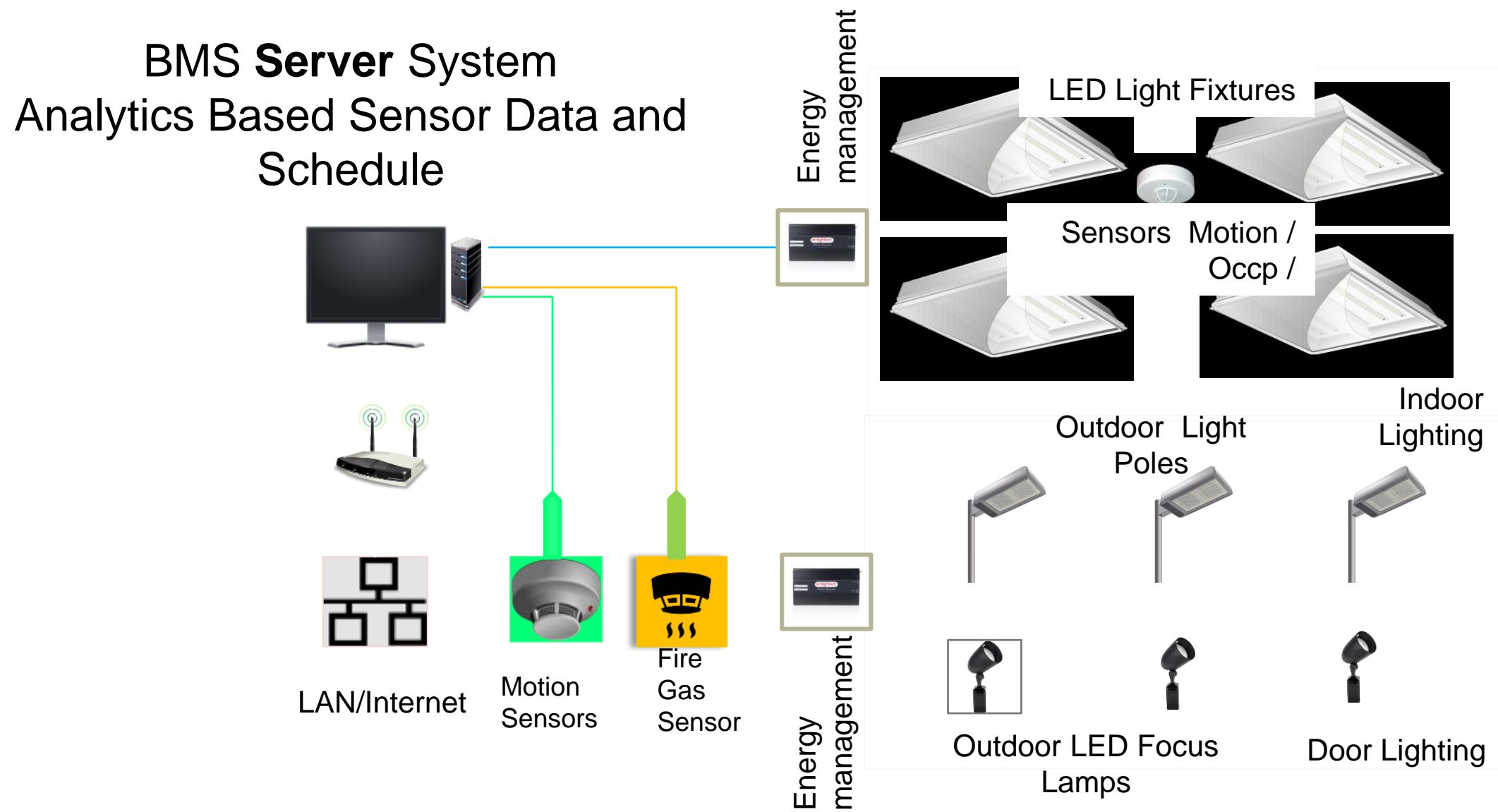


# **LIGHT & AV AUTOMATION FOR MEETING ROOMS , CLASS ROOMS AND LIBRARIES**

# LIGHTING CONTROL FOR MEETING ROOMS

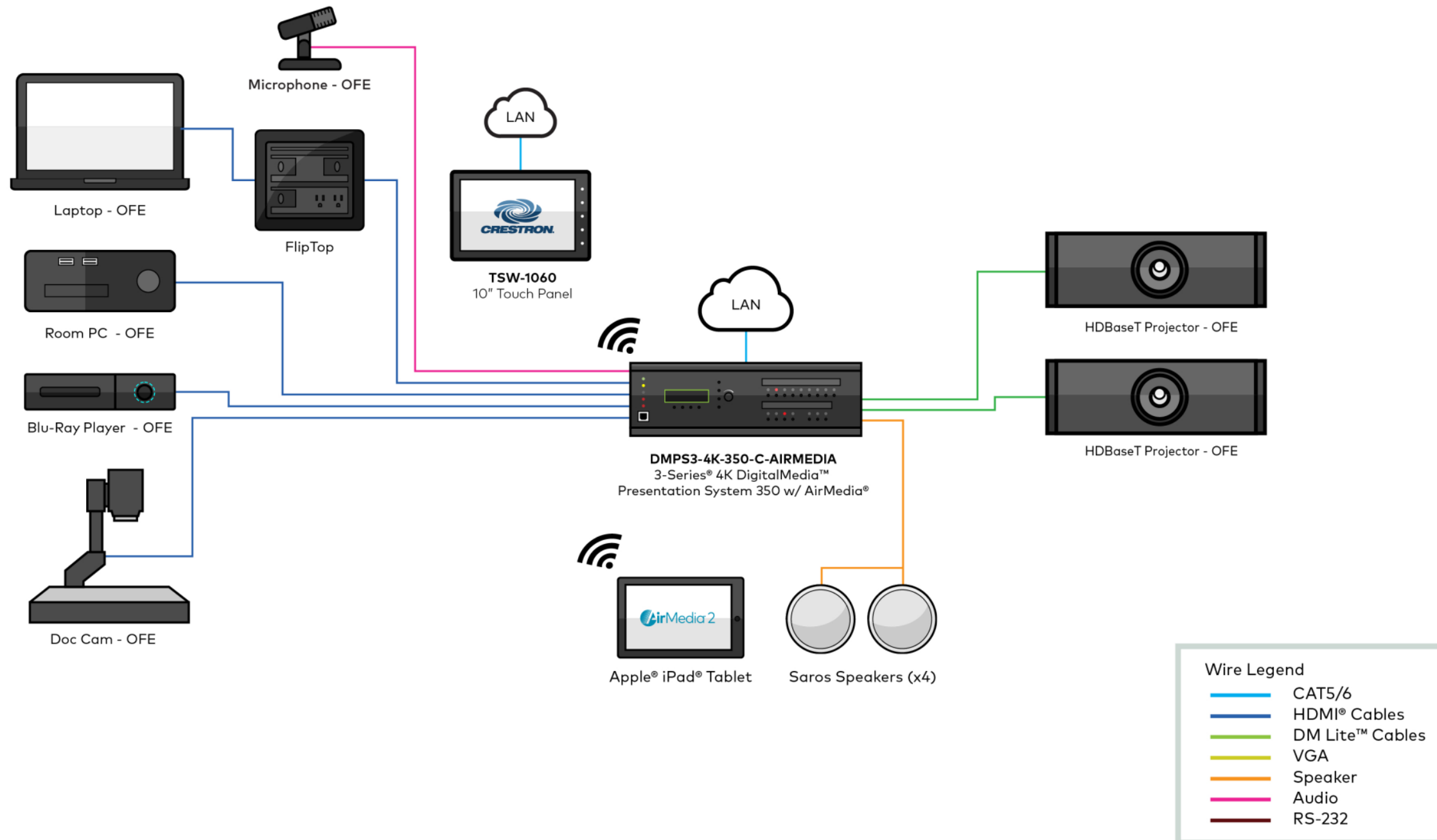


# LIGHTING CONTROL SYSTEM



Energy saving over traditional lighting energy efficient  
is from **15% to 25%** Using latest Technologies

# A/V CONTROL FOR ROOM





# ROOM MANAGEMENT

Friday

10:00 AM

Available

 Reserve  
24 minutes


10:30 AM

Project kickoff

 Matt Brown  
30 minutes

11:00 AM

Available

 Reserve  
4 hours 30 m

Available

until 10:30 AM

10:06 AM

Friday, February 7, 2014 | 22 Link Conference Room 233

# **FEATURE'S COVERED**

- **Lighting Control**
- **Class Room Management- Vacant/Available**
- **Projectors**
- **BGM**
- **Broadcasting Announcement**
- **Emergency Announcements**
- **Devices Control**
- **Digital Board Control**
- **Shades**
- **Public Address System**

# **SOME OTHER SOLUTIONS TO CONSIDER**

- **Infra Inventory Management**
- **Guard Tour Control**
- **Sensor Based Water Dispensing System**
- **Locker Management Solutions**
- **Solar Power Control System**







**Call us To  
Plan for  
Post Covid  
Operation.**

**Resume  
Work Safely.**

**Contact Us:::**



**Be secure ... Be connected**

**Advantedge Technologies Pvt. Ltd.**

B-48, Pravasi Industrial Estate, Goregaon (E),  
Mumbai - 400063.

**E-mail:** [ashok@advantedge.co.in](mailto:ashok@advantedge.co.in)  
[subhsah@advantedge.co.in](mailto:subhsah@advantedge.co.in)  
[padam@advantedge.co.in](mailto:padam@advantedge.co.in)

**Tel.:** +91 22 4250 4250

**Fax:** +91 22 4250 4216

[www.advantedge.co.in](http://www.advantedge.co.in)