Thai Global Technologies

Bringing You Vision

We at Thai Global Technologies (TGT) aim to become a leading business in providing system installation services. We emphasise and take pride in our vision of conducting business with the highest quality and care for our customers. We provide you with the latest and best technology to aid with your everyday operations, security and safety.

Giving you a peace of mind that allows you to focus on what really matters, your business.

Our solutions are built from the ground up, meaning they very flexible and are suited to your every need. All of our services can be integtrated with your existing systems or built up with 3rd party software and hardware of your choice.

Our process is simple. We will discuss with you about your needs as a business. Then we will build a system suited to you with all the hardware and software required, along with any training needed for you and your staff. After successful installation and training, we will continue to maintain and upgrade your system when your business grows.

So we invite your to explore the opportunities ahead.

Contact Us

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Our Services

ANPR

What is ANPR?

ANPR (Automatic Number Plate Recognition) performs optical character recognition on images to read the license plates on vehicles. ANPR can be used with a range of existing camera networks or with cameras specifically designed for the task.

The benefits of using ANPR

- Improved and efficient management of traffic in different areas, such as car parks, ports, toll highways, bridges and so on.
- Ease of use prevents car theft or illegal maneuvers
- Allows for access control into warehouses or factories for vehicles and containers
- Automated process allows for ease of monitoring and access control. This also
- Reduces the need for multiple staff to monitor an entire complex of vehicles entering and exiting the compound.
- Also used to identify containers and cargo to increase efficiency when it comes to logistics and day to day operations of warehouses and ports.

How does it work?

- Cameras detect a vehicle and create an image within milliseconds with >95% confidence level.
- Special ANPR software then detects and reads the license plate and creates a plain text of the plate. The software can recognize plates from all over the world, including codes on containers that adhere to international standards for identification
- The information can then be automatically processed and stored. This can can give the user any information on the vehicle, such as the color and size of the vehicle or container, and whether it is allowed into a restricted area or not, and many more.
- All of these options are configurable to your requirements

ANPR

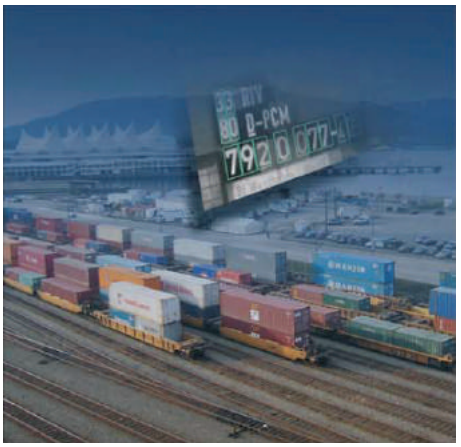
ACCR, UIC and ADR identification codes

ACCR (Automatic Container Code Recognition)

Used to recognise unique container codes and identify all the information available that is associated with that container. This technology is increasingly used in harbors, logisitic centers, and railway yards, due to the automated process.

They can also be used to for tracking particular cargo as it travels through the network

UIC wagon numbers (Railway Trains)



Similarly to the ACCR identifying process, the cameras identify wagon (coach) numbers of passing trains.

A very useful tool, as it creates a common language between railway operators, infrustructure companies and related state authorities

ADR (Dangerous Goods)

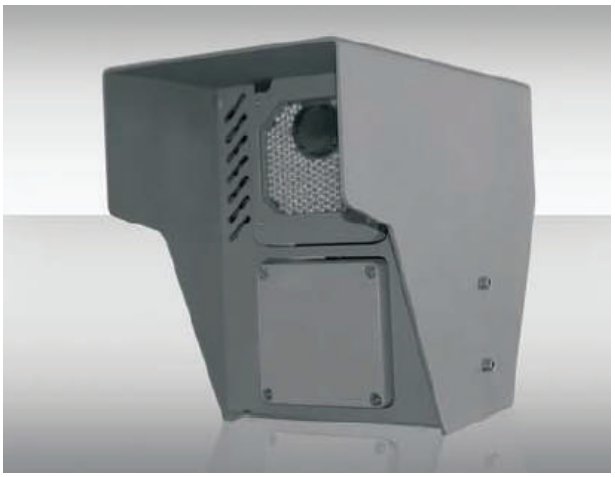
Vehicles transporting dangerous and hazardous goods should always be supervised.

All trucks carrying hazardous goods have a Hazard Identification Number (HIN) and can be detected by the cameras and software, and alert you to the presence of hazardous goods entering your area

This technology is also useful at international borders, where we can provide document scanners and link them to all the cargo passing through. This provides an improved experience when tracking cargo through the network

ANPR

Highway ANPR applications



ANPR can also be used on the highway or highway tolls to manage traffic flow and set up speed traps.

The cameras used for this purpose are able to identify many plates in a short amount of time (as cars are moving by fast on highways).

They require very little infrustructure close by, as all the data is stored within the camera in the short term and is sent to a main command hub via the internet. They require very low bandwidth so receiving information such as speed, licence plate number and time are almost instant.

ANPR can be used in this type of speed trap, where the cameras can detect how fast each vehicle is going. If a vehicle is speeding over the configurable speed limit, then a picture is taken, number plate identified and the user is alerted and can deal with the incident accordingly through a smooth, automated process.

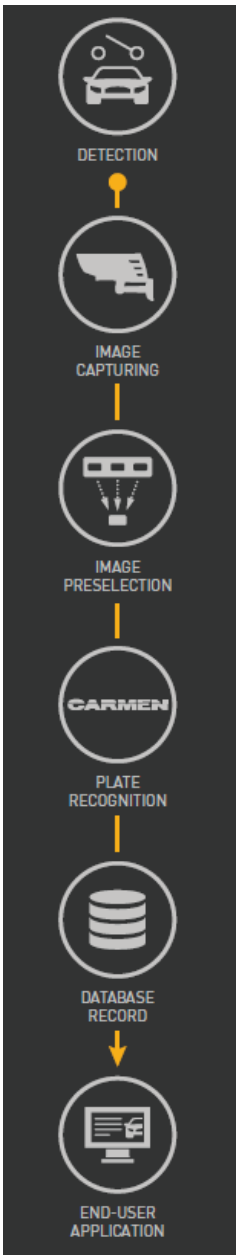
ANPR

ANPR Structure

Cameras can be installed next to roadsides or where they can easily detect oncoming vehicles.

The image is then captured by normal IP cameras or specific ANPR cameras, that have powerful nightvision and high resolution.

The images are then enhanced and A.I. technology analyses the image for the number plate and any identification of the vehicle or cargo container. The software then records and stores all the information available from this plate and displays it to the end user. Information can include: Driver name, country in which the vehicle is registered in, origin of cargo, blacklisted vehicle etc.



Hardware

As mentioned before, your existing cameras can be used for ANPR, however, if you would like specific ANPR cameras, there are a range of different ones available for specific environments.

These are some examples of the different types of cameras used for ANPR. Other than these cameras, there are some that have larger ranges that can detect vehicles from 20 to 40 feet away, even during the night, due to the powerful nightvision on the cameras.

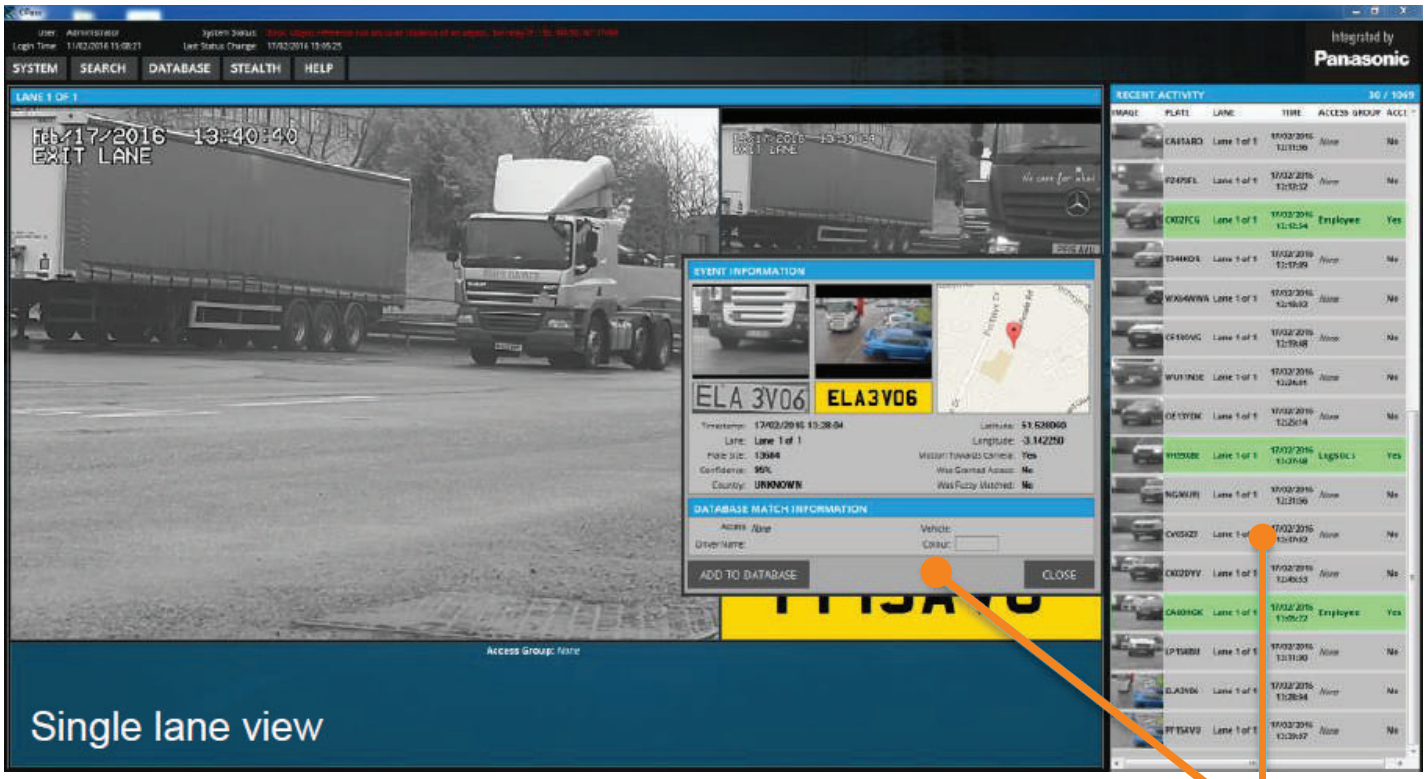
Installing multiple cameras increase the accuracy and amount of images required to monitor a restricted area for access control

ANPR

Software

The software is customizable to your needs. It can help automate multiple processes involved with logistics at seaports, airports, warehouse, access control into restricted areas or increased efficiency at tollways and car parks.

The software is able to store and display lots of information in real time with configurable alerts, audit trails, scheduled access control and customizable database



Recent activities list

Lane capture with plate crop

Overview capture with plate OCR

Database info if matched

Location with lane coordinates

The software can detect local plates, as well as international plates for applications at harbors and airports.

There is also an optional web interface that allows remote administration of database updates, access control schedules and historical plate searches

CCTV/IP Camera System

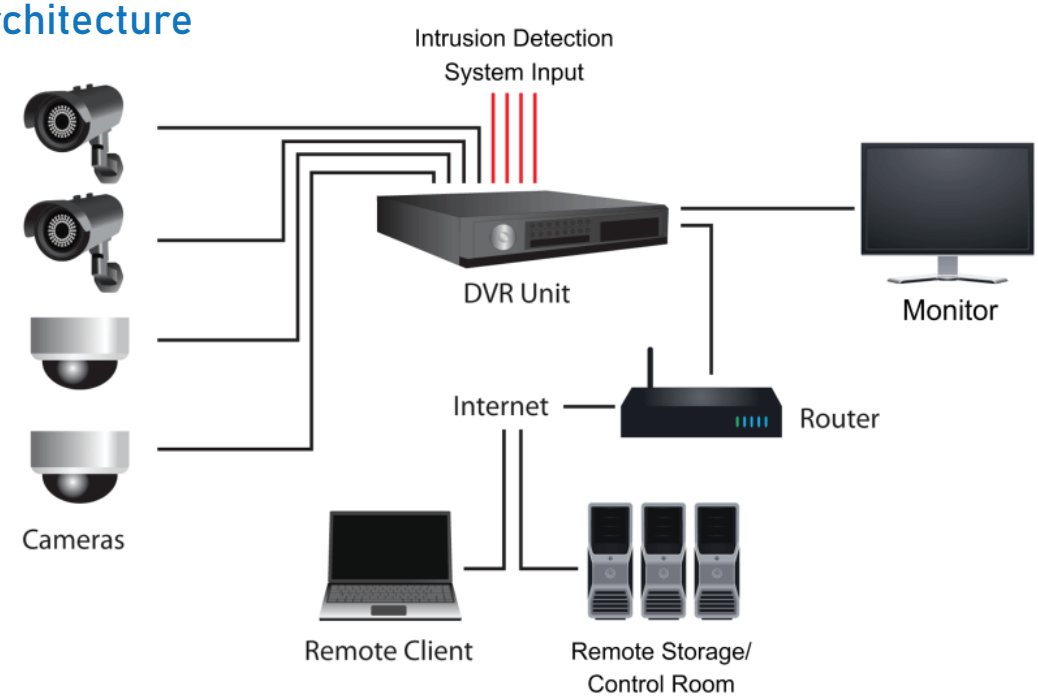
Why the need for CCTV?

CCTV systems are essentially the heart of monitoring and protecting businesses.

They allow you to maintain a high standard of safety and security from a single command room or on mobile anywhere in the world. The system is essentially your eyes and ears that cover your offices, factories, warehouses, car parks and many more.

- You are able to monitor the safety and security of your assets and staff, 24/7.
- Prevent and deter any unwanted intruders whom may disrupt your business
- Being able to monitor your entire business allows you to improve your logistics planning and day to day operations
- Fully customizable system with an unlimited number of a range of cameras
- Fully custom built servers or server space for recoding and storing footage
- User friendly software that requires minimal training for you or your security staff
- Nightvision cameras can be installed for 24 hour operation and in poorly lit areas
- Monitor an entire complex with state-of-the-art A.I. software, for example: Fire, weapon and violence detection, people counting, ANPR (Automatic Number Plate Recognition) and so on
- Option for third party integrations

CCTV Architecture



CCTV/IP Camera System

Hardware

There is a huge range of cameras in the market, ranging from simple IP cameras with low resolution, all the way to PTZ (Pan, Tilt, Zoom) cameras with 1080p+ resolution and state-of-the-art night vision.

Cameras can be mounted almost anywhere, both indoors and outdoors, making them extremely versatile and useful for the safety and security of your staff and in turn, the general public.

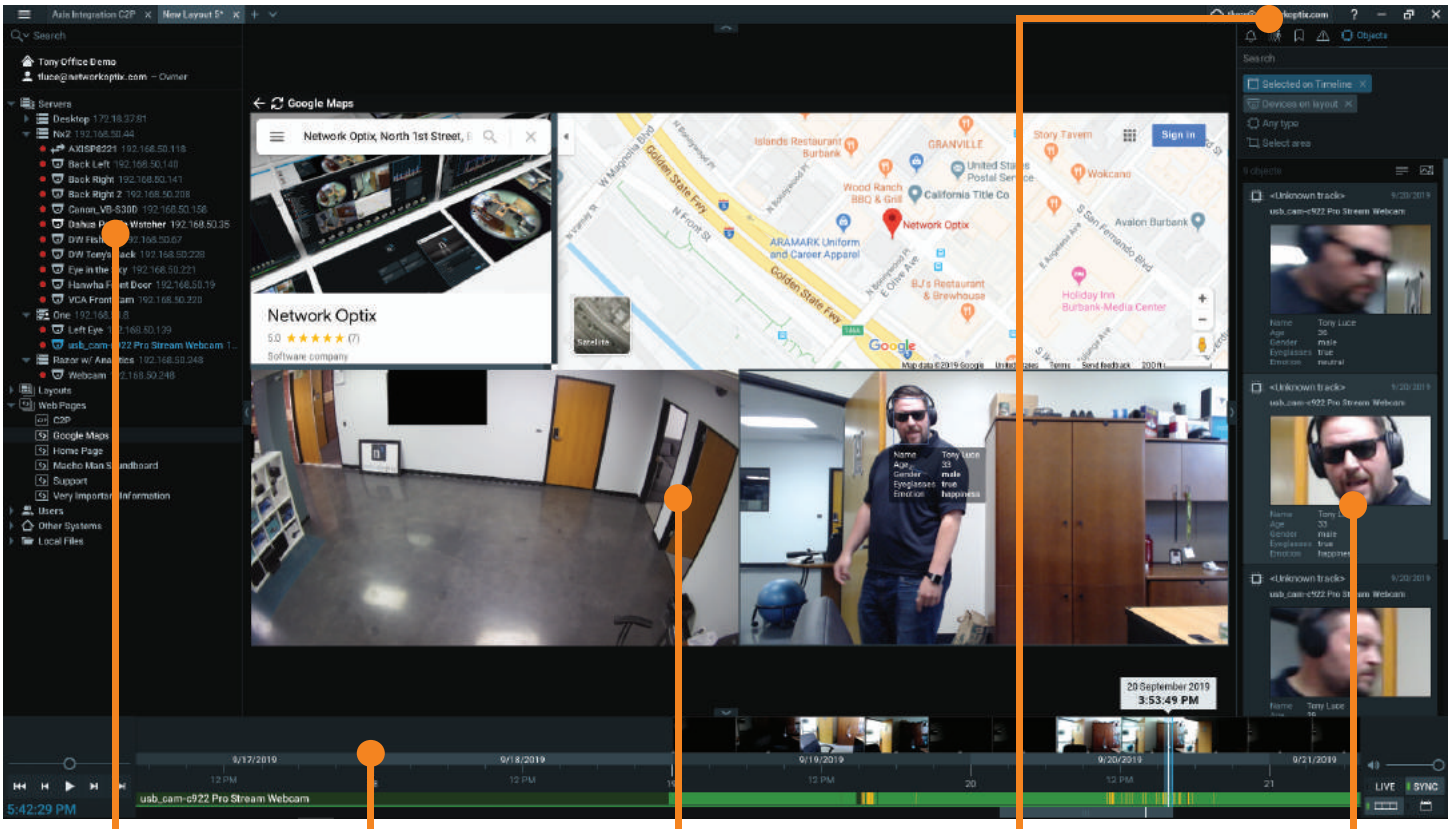
We are able to connect all cameras to one or multiple DVR (Digital Video Recorder) units, that are used to convert the footage into something that you can view on the end user VMS (Video Management Software).

Software

You will have access to a multitude of VMS software and we will integrate whatever works for you. They all use A.I. technology for facial recognition, fire detection, intruder detection and much, much more.

Nx Witness
VIDEO MANAGEMENT SYSTEM

CCTV/IP Camera System



List of cameras, users, and other systems

Timeline and playback

Main panel where all footage is viewed and layout can be fully customized

Cloud access

Events, triggers and alerts

GPS Tracking & MDVR

What is GPS Tracking and MDVR?

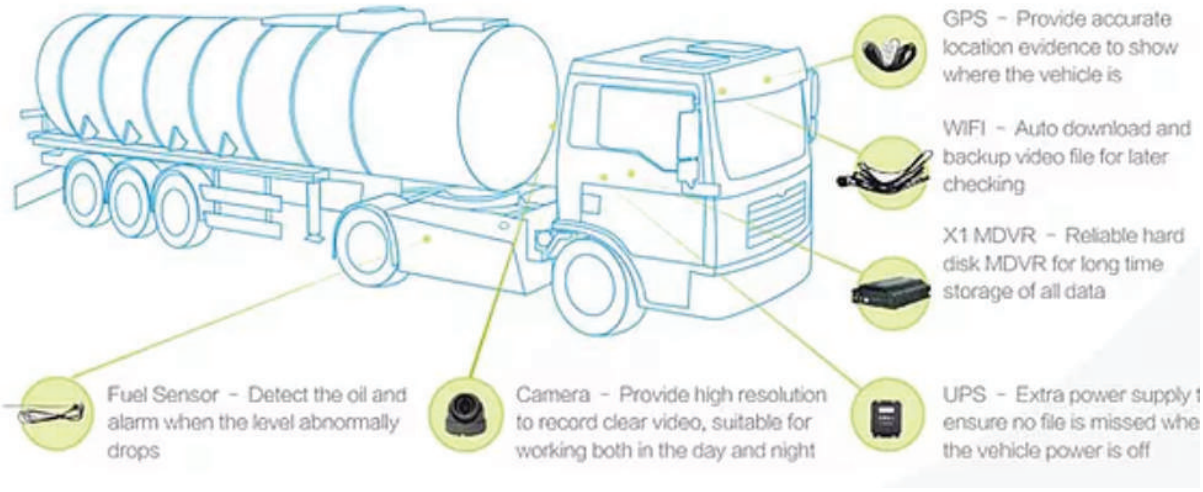
This system is used to track and monitor vehicles in your fleet, no matter how big or small. We essentially install black boxes in each vehicle, which then uses satellites to track the vehicles precise location in real time.

MDVR (Mobile Digital Video Recorder) uses the mobile cellular network to track the vehicle and also provide real time video footage from cameras that we can install in the vehicle.

The Benefits

- Track any vehicle from a central command room or your mobile phone/computer
- Receive data such as fuel levels, origin and destination of the vehicle with intelligent fleet management software
- With multiple cameras installed on each vehicle, you are able to monitor or recall any incident both from inside and outside the vehicle
- An additional monitor can be installed in the vehicle to provide driving aid for the driver (e.g. reversing cameras and security)
- Option to monitor driver activity and alert drivers who may be falling asleep, lost concentration or doing anything illegal

We are able to customize this system to your budget. Anything from just tracking a vehicle in real time, all the way to fully monitoring vehicle speed, fuel, distance travelled, origin, destination, camera footage, driver behavior and so on.



GPS Tracking & MDVR

MDVR Architecture

Hardware

The main MDVR box is connected to the vehicle's power (optional power supply for operation when the vehicle engine is off).

This is the main hub within the vehicle where all peripherals are connected to this device. It also houses the sim card for GPS tracking and signal

Cameras offer a real-time or recorded view of the vehicle from multiple angles such as, the front, back and side of the vehicle.

They also offer inside views of the driver to monitor their driving behaviour and safety

GPS Tracking & MDVR

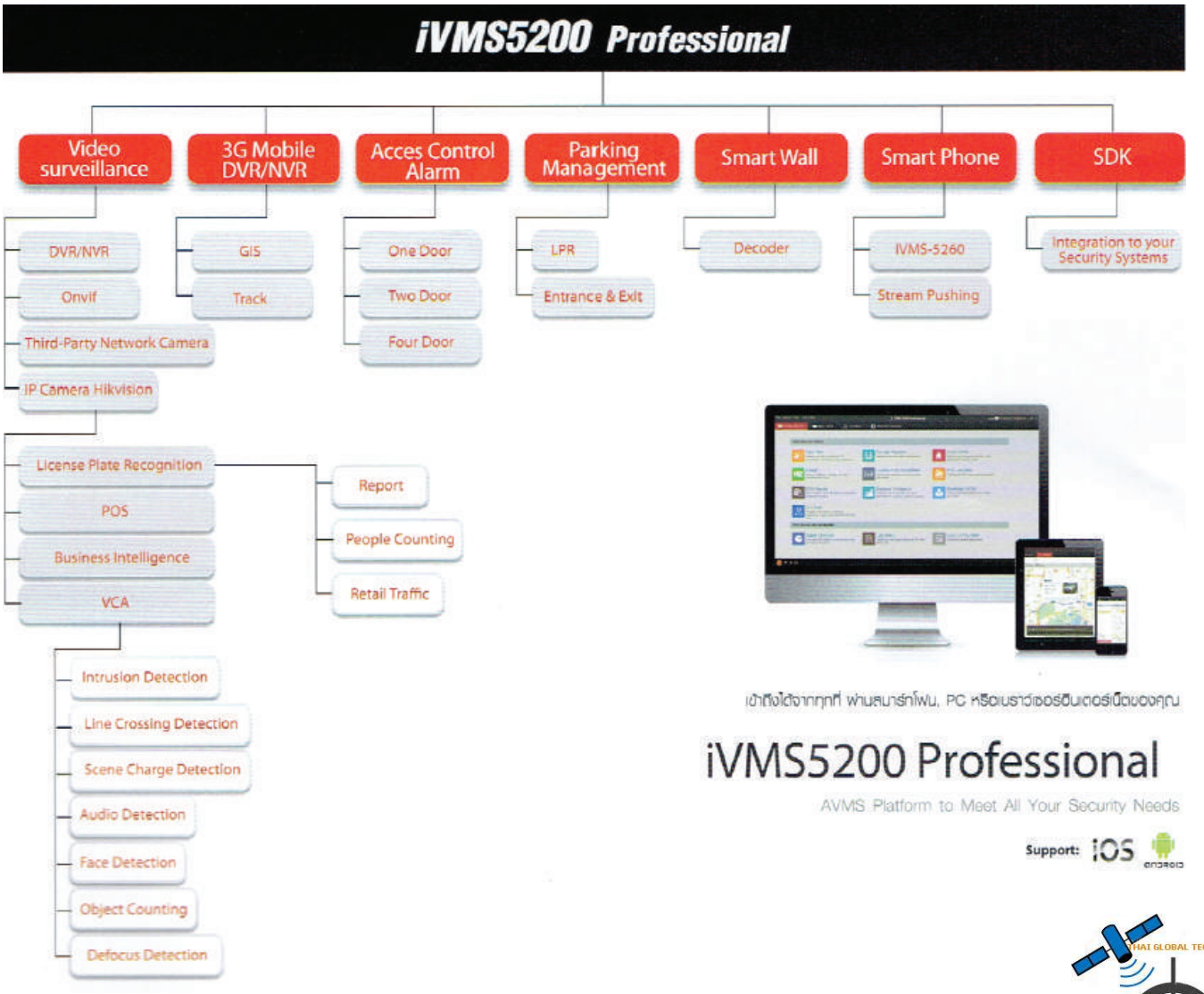
A small, usually 7 inch monitor can be set up within the vehicle to view the cameras installed.

This is useful for installations in buses, trucks, taxi's and security vans. This unit can also be connected to the MDVR unit.

Software

This can be used in conjunction with CCTV monitoring software as stated in the CCTV/IP Camera System section.

Furthermore, footage can be viewed from anywhere in the world with the MDVR mobile application. You have the ability to set up triggers to alert your mobile phone in case of any incident, as well as track and view your vehicles all in real-time.



Access Control

Different Types of Access Control

- Electronic access to private areas e.g. Offices, schools, factories, apartments
- Access control in public areas e.g. stadiums, train stations, public buildings
- Checkpoints such as temperature and mask checkpoints before entering into enclosed areas

Hardware

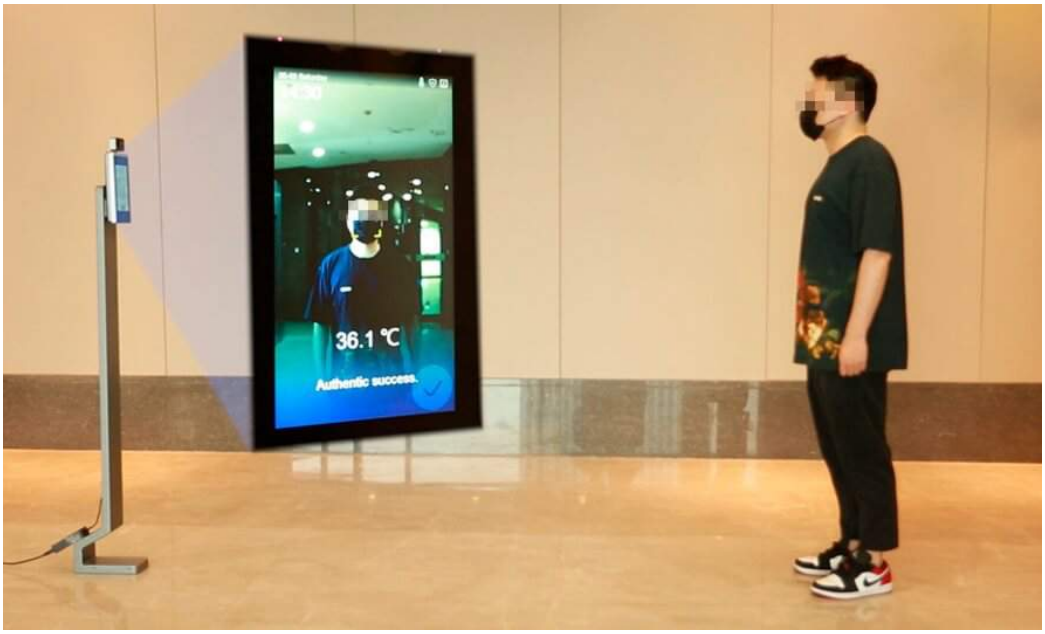
There is a range of hardware, depending on the application of the access control.

We are able to provide the likes of barriers for entry into a warehouse or car park; cameras with facial recognition; people and vehicle counting; intrution detection; line crossing etc.

Nowadays however, there is the need for temperature checks, mask checks and social distancing. With new hardware, we are able to achieve all these things, making normal operation in a business a lot mre efficient and safer for all.

With facial recognition cameras that can act as temperature and mask checks, the process of safe access to areas has become more efficient.

This hardware can read people's faces up to 8 feet away within seconds.



Access Control

Hardware

There is also an option for barriers for people for entrances to offices or enclosed public spaces.

These are very customizable and include the option for card readers, temperature checks, mask checks and facial recognition (if a blacklisted person attempts entry, they will be denied)

Besides just facial recognition, access control hardware can also include passcode modules and fingerprint scanners for multiple ways of entry

Software

This can be extended from CCTV software. Facial recognition and vehicle detection use A.I. technology to take an image of the object or person and analyse it to determine whether to allow access or alert the end user, all within seconds.

You are also able to store a huge database of your staff's credentials securely, so only they have ease of access to your offices or warehouses. If the software detects an unfamiliar face, then it will alert the user and deny entry to that person.

The software is highly customizable and can be configured to your exact needs, including different user access levels.

Hazard Perception

What is Hazard Perception?

Safety is a top priority when it comes to businesses and their staff. Hazard perception is making sure your factories or warehouses are clearly signed and lit up for dangerous operations.

With road signs for large vehicles moving around and traffic and pedestrian light systems, it keeps your business operations running efficiently, as well as with the utmost safety. This gives both you and your staff a peace of mind and prevents any incidents from disrupting business.

Signs

We can provide all types of road safety signs, from normal reflective signs to LED solar powered signs.

Hazard Perception

Lights

Traffic lights and pedestrian lights can be integrated with barrier systems and access control systems.

Traffic light systems are also highly customizable with any number of junctions and lanes, as well as pedestrian crossings.

Road lights are also important for safety at night. We are able to provide street lighting that runs off solar energy. Since they will not be turned on during the day, they charge with the energy from the sun and then use that stored energy to run the lights at night. LED lights are also efficient with power and are long lasting.

Data Centers & Command Rooms

A lot of the systems that provide security and safety to a business use a central hub known as command rooms or command centers. This is where all the CCTV footage, MDVR footage, access control configurations and more are set and monitored.

Having a command room or center essentially allows ease of access and monitoring of the entirety of your security and safety systems.

Alongside a command room, you have the option to build a data center where your servers are stored and cooled. These servers will house all the data from the various systems that you have in place. If you do not need a custom built server, then server space is rentable.

TV Wall

A TV wall allows the users to view multiple camera feeds, webpages, MDVR feeds, logistical tracking and much more, at the same time. This essentially provides an overview of the entire company in one place. Alerts can be set to show in case there is an incident detected in one of the camera feeds. From here, you are able to call emergency services or deal with the problem accordingly.

Servers can also be housed behind a TV wall, where all the data that is being fed to the hardware running the TV wall, can be stored. In the unlikely event of problems with a server, there is ease of access.

Solar Cells

We can provide a solar cell solution to suit any requirements, whether that would be ranging from a small scale off-grid solar cell system, all the way to mass production of slar energy on a solar farm.

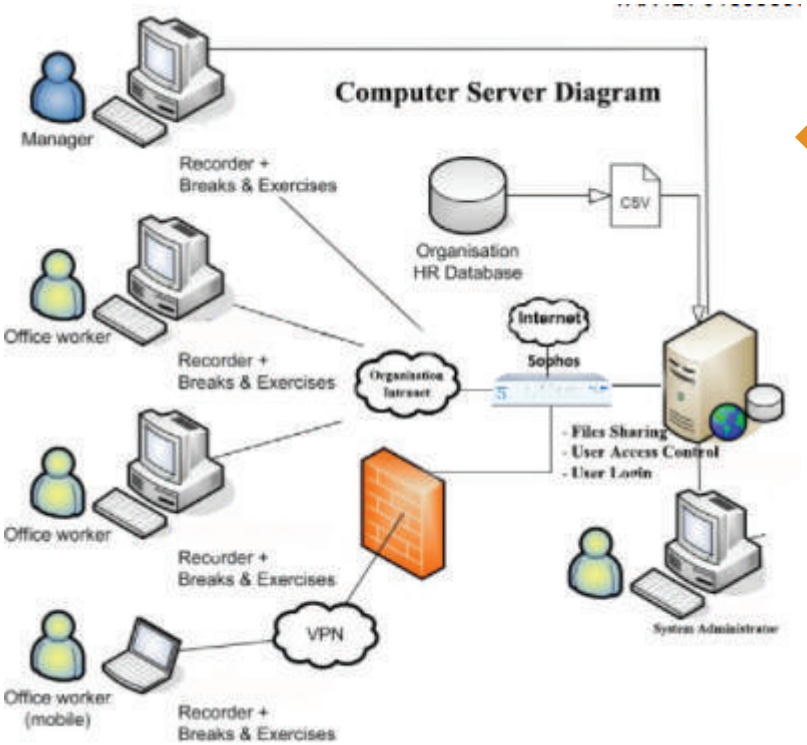
We supply and install all solar panels, wiring, meters and converter boxes of the system that we have designed for you.

We also have a solar + diesel generator solution. In the event of a power outtage, a diesel generator can be utilised as an alternative source of energy, supplying power that is missing from the national grid or solar panels. This system is particularly useful in environments that are characterised by an unreliable grid operation.

Our Projects

B S A Food Products Co., Ltd Thailand

Maintenance of the computer server, web mail services and firewall



Computer server diagram drawn up for B S A Food Products

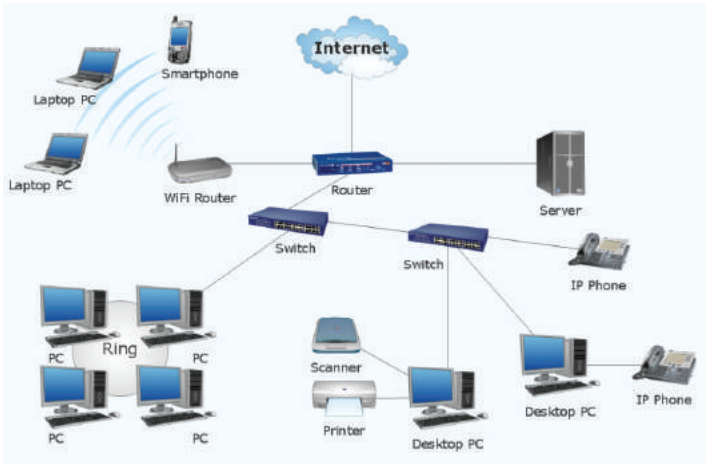
Serviced and maintained the company's server

MTrack Co., Ltd
iStartek GPS Co. Ltd
Howen Technologies Co. Ltd (China & Malaysia)

GPS tracking and MDVR installations

KG Lerdphan Co., Ltd
Thailand

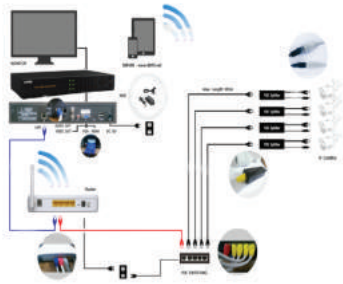
Access control system with fingerprint scanning and facial recognition, plus time attendance system.

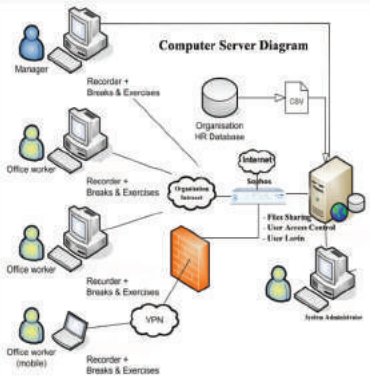


Door fingerprint scanner and door magnet lock

Chaiwan Lohaphan Co., Ltd
Samut Prakan & Chachoengsao Plants
Thailand

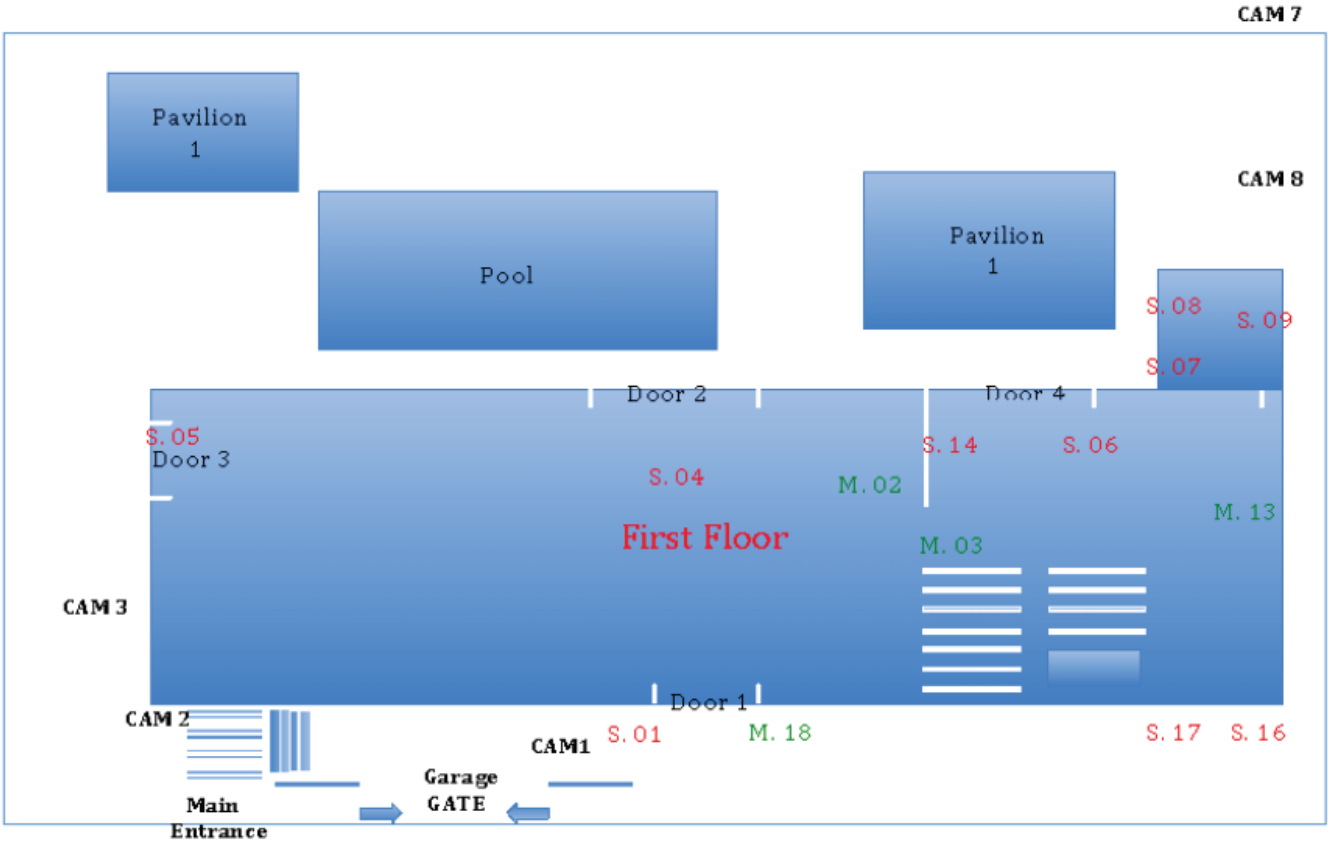
Computer Networking & CCTV IP Network cameras & web application & GPS Tracking





Samui Villas Co., Ltd
Thailand

CCTV system installation with access control

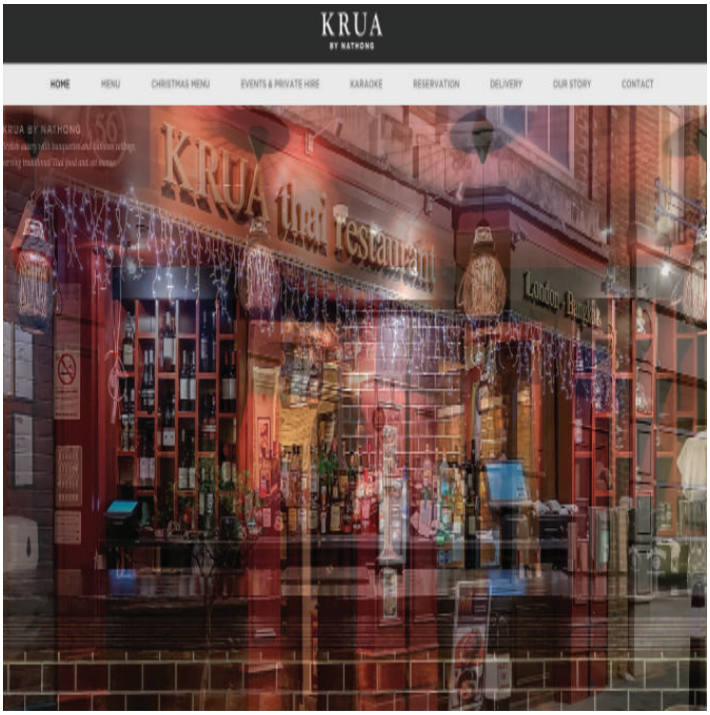


S = Door Sensor
M = Motion Sensor

Krua by Nathong
United Kingdom

Website application and service, with graphic design

Menu graphic design

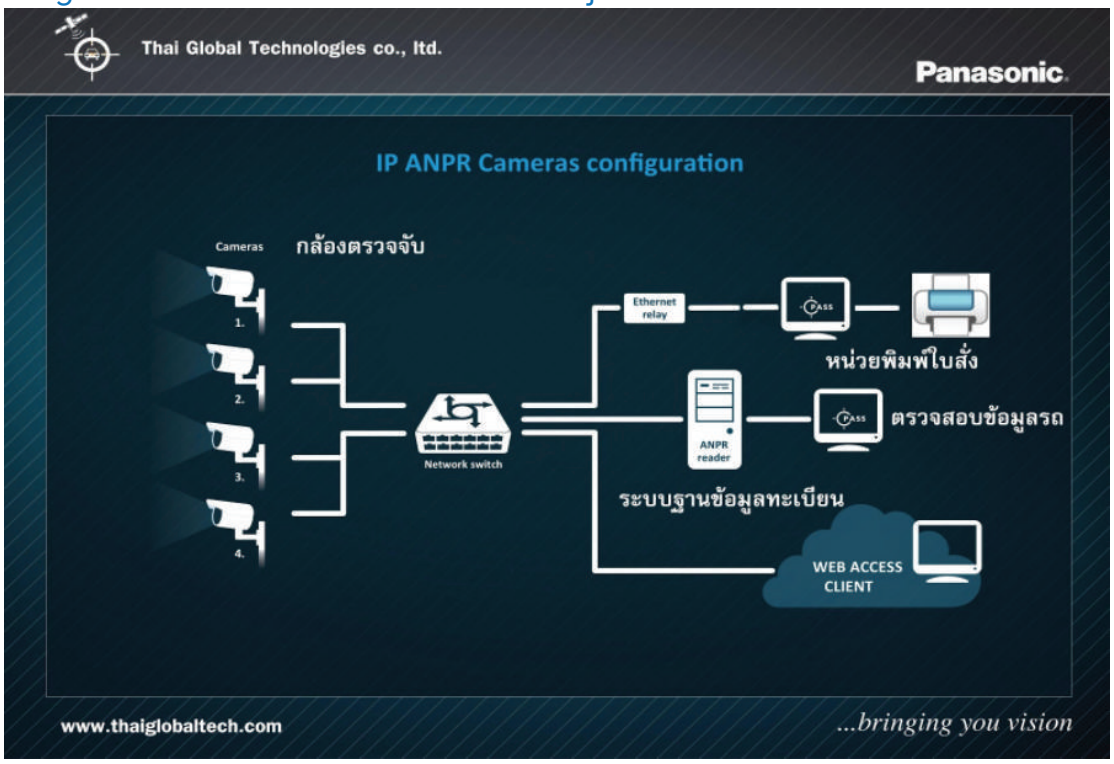


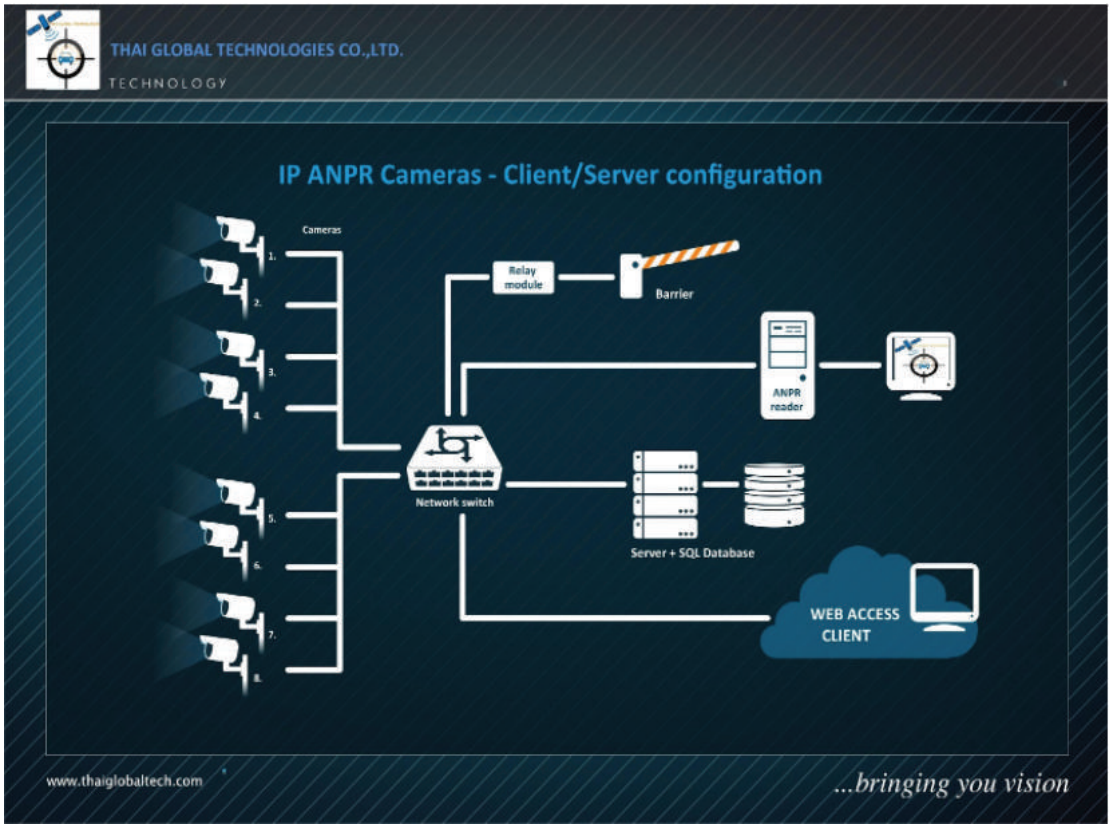
Website design

Royal Thai Police
Thailand

ANPR enforcement check point with Licence and number plate recognition

ANPR / LNPR. Working with the Southern Thai Police camera enforcement unit, who are responsible for the operation of both mobile and variable speed cameras.
Our objective was to reduce vehicle speeds at identified casualty hotspots, thereby reducing the number of fatalities and injuries on the roads.





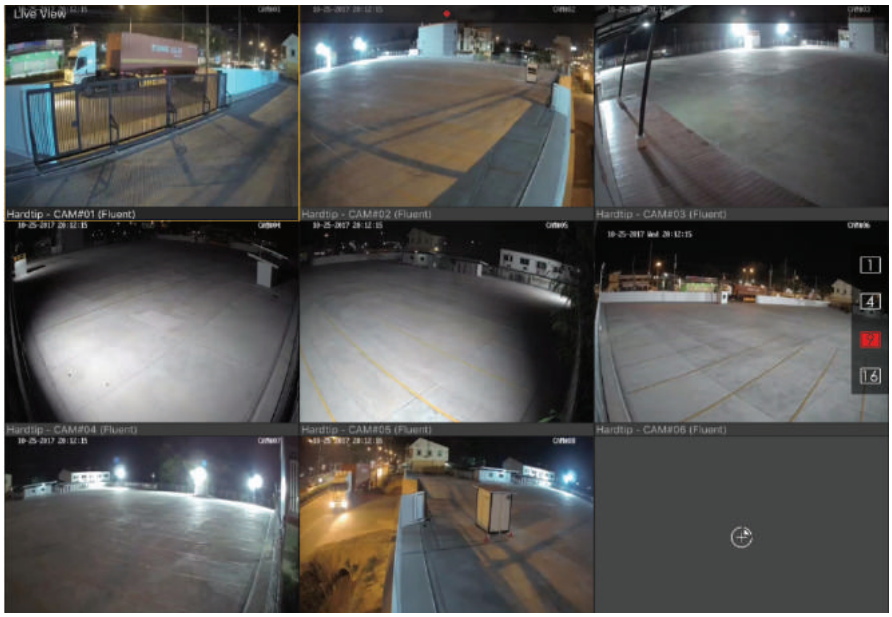
Haad Thip PLC.
Thailand

CCTV & IP Network Cameras System set up in various branches.

Access control with traffic barrier at their Phunphin bottling plant.

GPS Tracking and MDVR on their fleet of delivery trucks

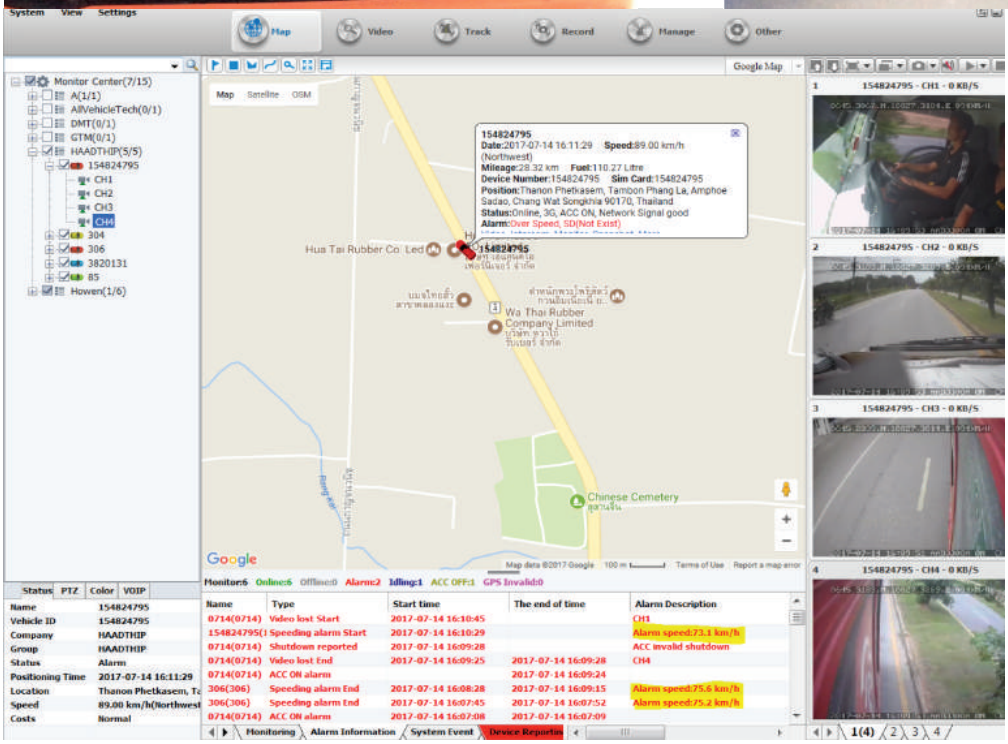
TV Wall System with small data center to monitor all of their operations



Part of the CCTV system we have installed on view

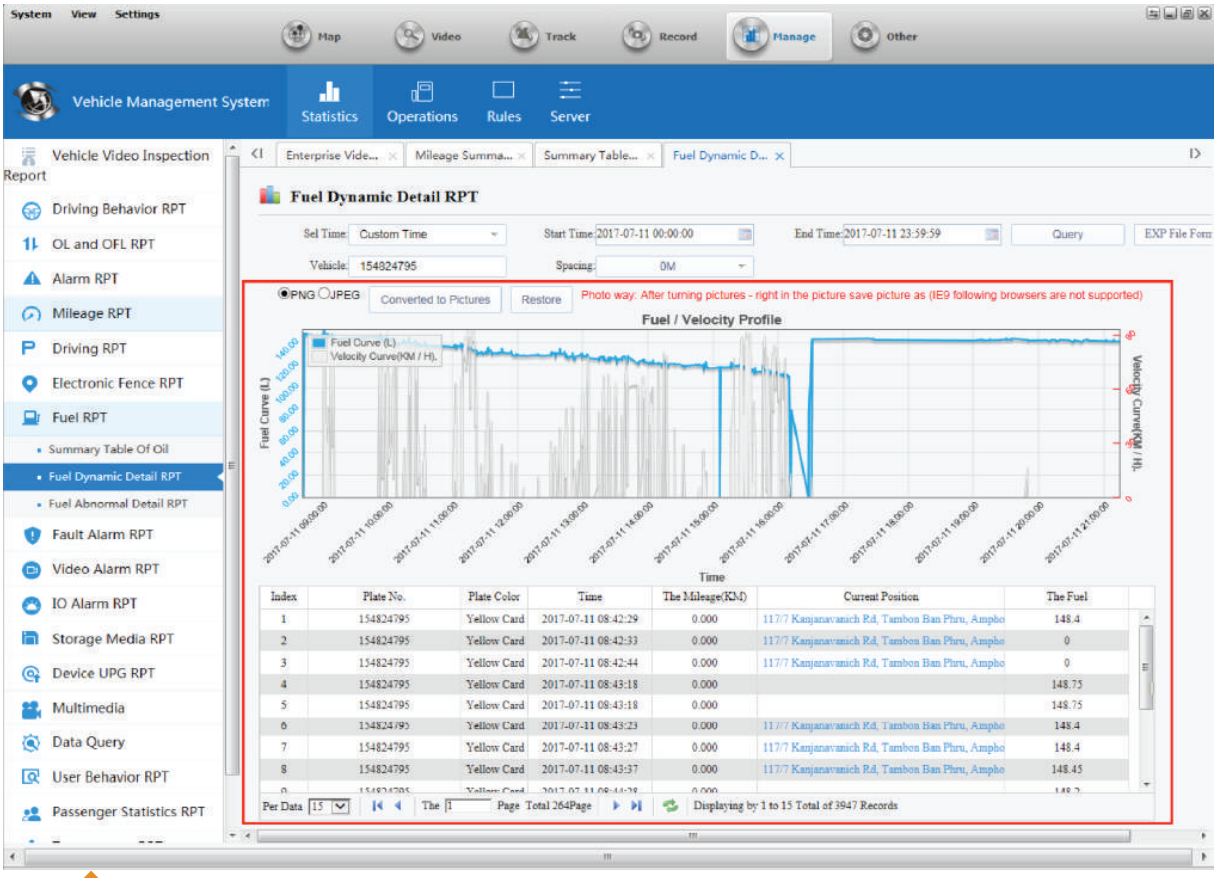
Card, code and fingerprint scanner for access control into a room

Haad Thip PLC.
Thailand



MDVR software and hardware working in tandom. A driver, side and front camera feed can be seen, as well as live tracking and incident updates

Haad Thip PLC.
Thailand



Fuel level software to prevent any stolen fuel or mis-used fuel from drivers

TV wall and command room for Haad Thip where company wide cameras and systems are monitored

Thank You

Our contact details are on the first page
Should you have any questions, we will be more than happy to help