TEIXON
On-Site

all-in-one drone operation site management platform

2022.07

About
TEIXON

TEIXON is a leading Software product company

TEIXON is creates new value through location-based video technology.

The TEIXON portfolio is infused with industry-leading expertise

We are blurring the boundaries between location information and video

We are doing our best to increase the utilization value of video information that is generated countless times

We are aiming for a location-based video solution for a specific purpose coming from a variety of devices

We add location information and additional new value to the video, and through this, we try to present solutions to various problems with new services

Kim, young-woo CEO & Founder

About TEIXON

✓Republic of Korea software company since 2013

✓Composed of the best professional technical personnel in the field

✓Expert group in video content management, live video field, drone and IoT

✓Development of live broadcasting, video content management, location information and data management software for drones and IoT products

✓Cloud-based service and turn-key solution

Certificate of Inno-Biz

Ministry of SMEs and Startups

Certificate of Main-Biz

Ministry of SMEs and Startups
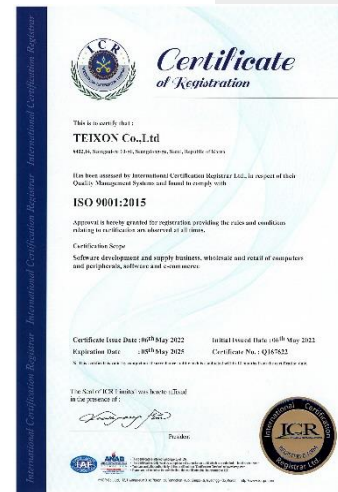
Certificate ISO 9001

Certificate of Talent development

Ministry of SMEs and Startups

Certificate of Venture

Korea Technology Finance Corporation

TEIXON
Technology benefits

✓Top class video contents management technology

✓Support easy standard connection of various devices

✓Automatic processing for combining location information and video

✓Display a variety of location-based information together

✓Provide the convenience of managing video content in all situations.

✓supports various use regardless of any platform

✓Easy to access as it can be applied on both mobile and web

TEIXON Technology

✓Video contents management

✓LIVE video streaming

✓Simultaneous users data transmission processing

✓Location−based video contents management

✓Location−based video searching

✓Orthophoto contents management

✓Drone GCS(Ground Control system)

✓UTM (Unmanned Aircraft System Traffic Management)

TEIXON Location

✓**HeadQuarter**
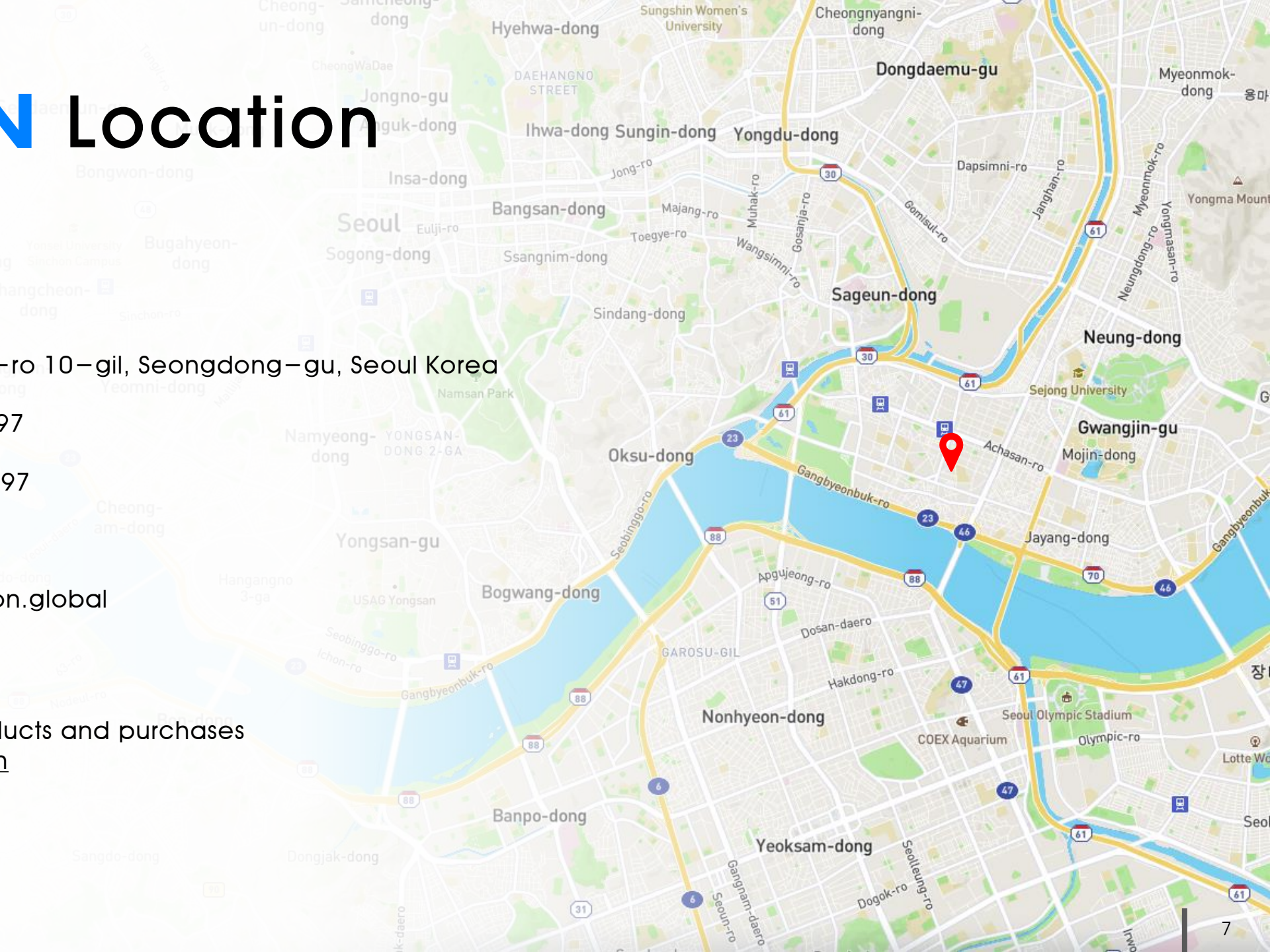
#402, 14, Seongsui−ro 10−gil, Seongdong−gu, Seoul Korea

Tel. 82− 2−468−1197

Fax. 82−2−373−1197

www.teixon.com

facebook.com/teixon.global

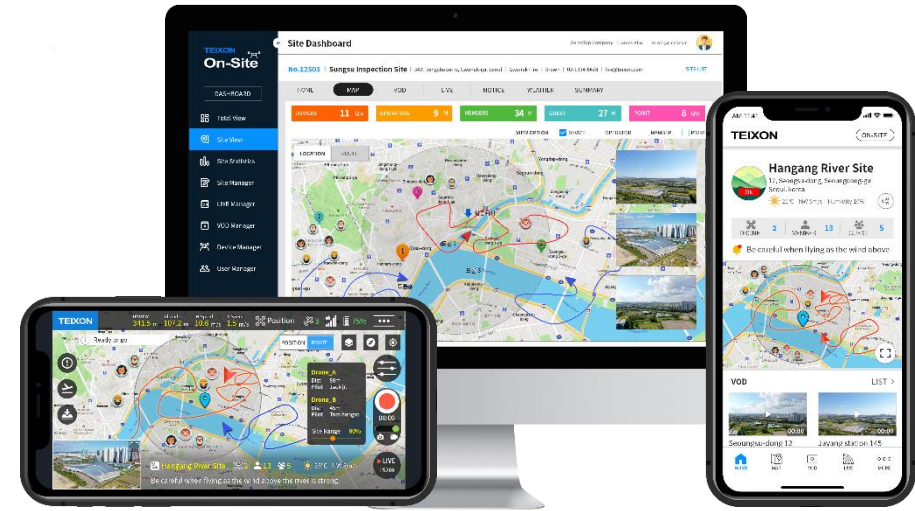Inquiries about products and purchases
support@teixon.com

About Products

Introduce

TEIXON
On-Site

all-in-one drone operation site management platform

It is an all-in-one drone operation site management platform for efficient drone flight, information management, and information sharing at drone use sites.

You can establish a drone flight plan for each site and operate the drone safely through automatic route flight, and you can share and manage the drone video and flight data in real time with the operator, field personnel, and the control room.

It also manages work location points, notices, movement information of field participants, and weather information for each site. Supports drones from various manufacturers such as DJI, Pixhawk, Autel, etc.

TEIXON

Background : ▶ Resolving various problems and needs occurring in drone operation sites

Needs	Difficulty in sharing real-time information such as drone images and flight locations in the field	Increase in demand to check changes over time by periodically automatically flying	Demand for accurate information is generated by using video and location information together	The need for drone asset management, history management, and site-specific data management increases
Photos				
problems	In the past, it was a system for the pilot for each drone setup and control	Lack of professional pilots and burden of manual operation	The location cannot be expressed because the video does not contain location information	The increase in drones, SD memory copy and handwritten data management limitations
Solutions	Provides real-time video, location, and information sharing to the pilot, field personnel, and related parties	Through the automatic route flight management function, the video and flight information are automatically saved together when the drone is flying.	Provides playback and search functions through location-based video synchronization technology that combines location information and video	Provides site-specific data management function, drone data image, and flight information automatic collection and recording function

10

Why? ALL IN ONE :

control

Drone setting, drone flight control, mission route flight management and execution, Check flight information

Management

Real–time flight status monitoring, flight plan management, flight history management, Drone asset management, operation status management

Video

Real–time video transmission and storage, video relay, video data management ,Location–based video management, video search, live mapping

Fields

Site–specific data management, key location management, notice,

Field participation manpower management, smart phone field broadcasting function

Sharing

Real–time sharing of video, location and field information through Web and Mobile App

TEIXON
On-Site

TEIXON

Key Feature-1 :

Real-time management of drone video and location information

- Real-time drone video and location information transmission
- Simultaneous management of multiple drones
- VOD storage at the same time as video transmission
- Optimized video transmission through variable video transmission
- Drone operation history management
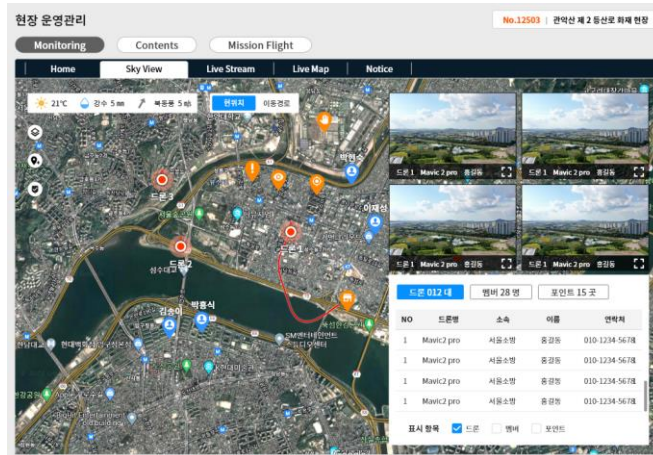
Auto mission flight

- Waypoint creation and management function
- Mapping flight path creation and management function
- Video VOD comparison function by time of mission route
- Mission route flight history management
- live mapping
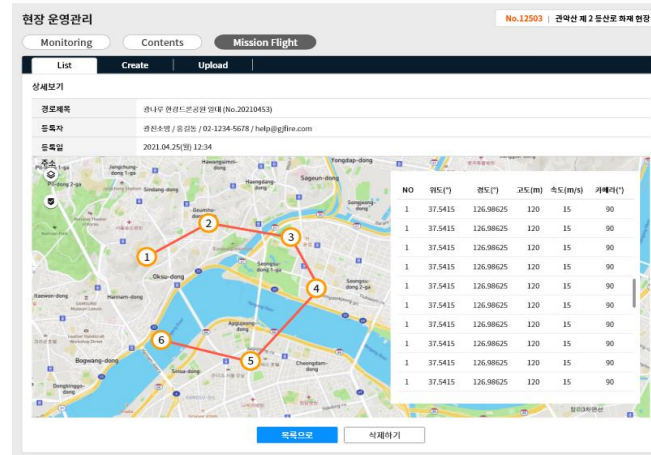
Real-time information sharing

- Real-time sharing of drone video and location information to the operator, field personnel, and related parties
- Sharing of business notice information, weather information, and important location points
- Display of nearby drone flight locations
- Participation of field personnel and sharing of movement information

TEIXON
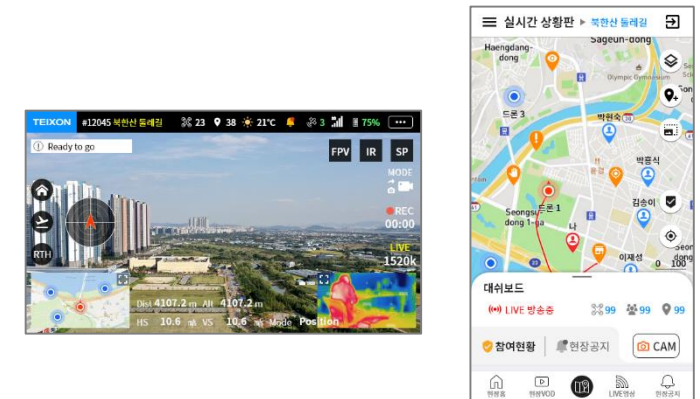
Key Feature-2 :

| On-site information management	Data management	Add-ons
• Information management for each site through site creation • Management of site-participating personnel and their location information • Smartphone live broadcasting function • Management of registration of major location points • History management (all information including drones, personnel, etc.)	• Management by project site • Video, location content management • Drone Asset Management • Member, group management • Statistics and reports	• Control all with one control app • Supports various drones such as DJI, Pixhawk, Autel, etc. • Automatic distribution of live channels • Supports both PC and Mobile • Korean/English multi-language support
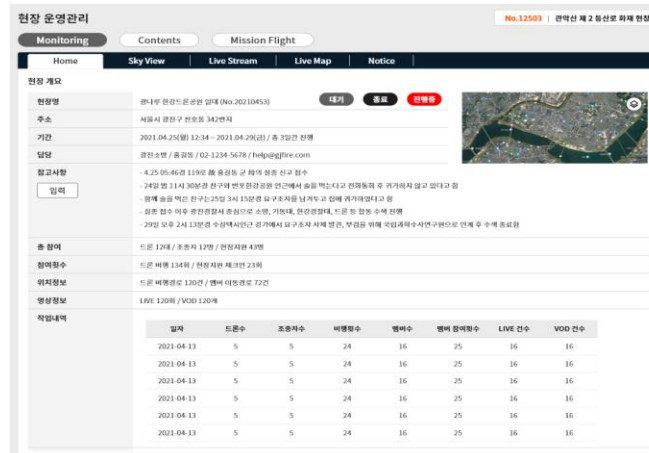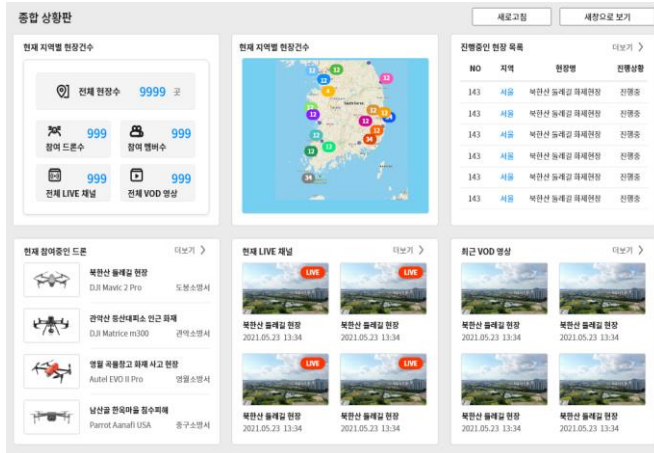
Key Technology-1 :

Combination of location and video information

Automatic route flight management

- Synchronizes and transmits the location and video at the same time as the drone operation starts
- The transmitted information is immediately shared with everyone as a live broadcast
- Image detection by time through image search according to location
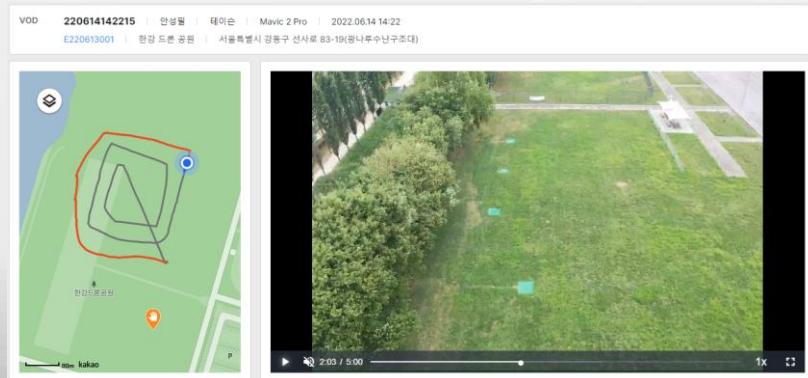
- Create and manage flight routes through mobile and web
- It can be reused repeatedly by calling the registered route
- Creating a route optimized for work while checking key location points

TEIXON
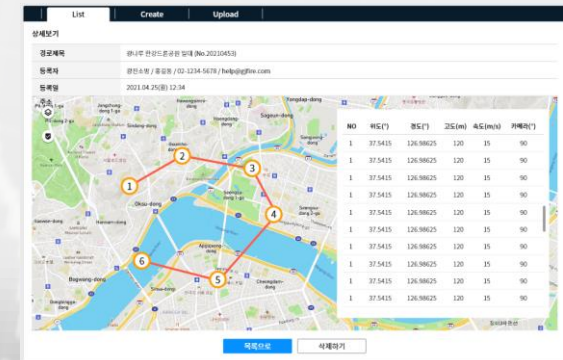
Key Technology-2 :

Video transmission for seamless playback

- Optimized transmission according to communication environment through variable video transmission technology
- Fast video playback and seek bar search through HLS stream segment technology
- Real-time rewind with live time machine

Automated image and data processing technology

- No operation required through automatic distributed processing of live streaming channels
- Simultaneous recording during flight and playback on VOD list immediately after flight ends
- All data is automatically managed as long as you operate the drone without any special operation

TEIXON
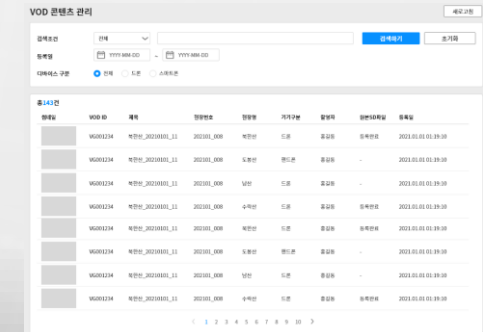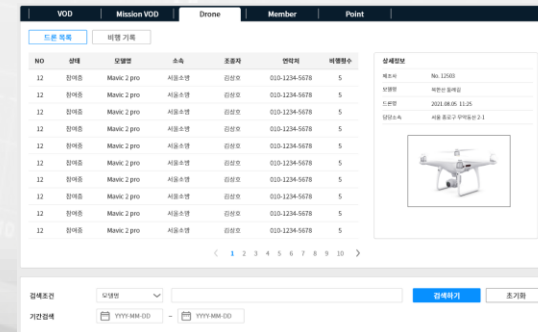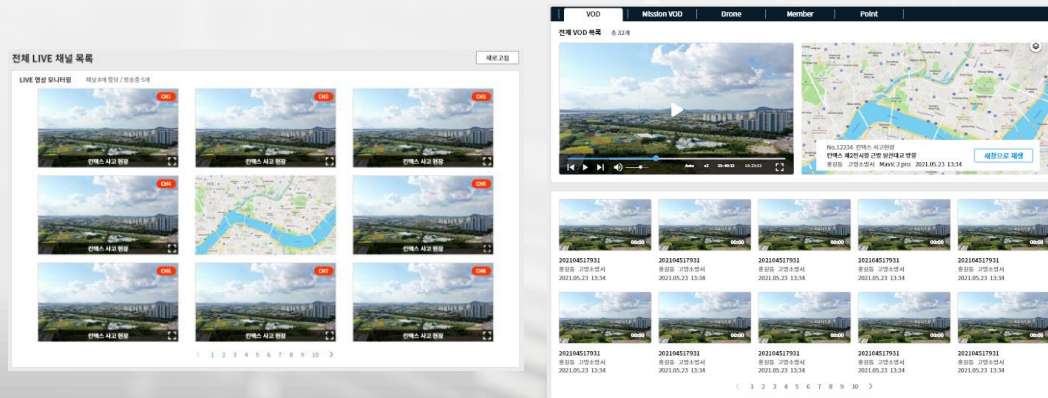
Key Technology—3 :

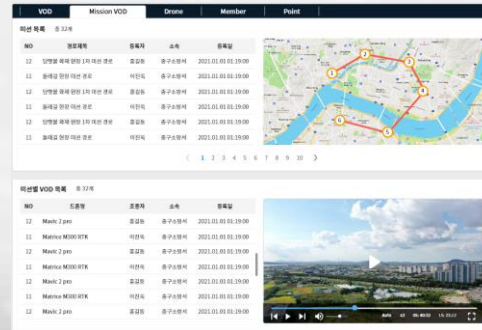## Live mapping and data management

- Live mapping images on the map while flying

- Mapping of images by time period captured through the same automatic route flight

- Provides data report and batch management function
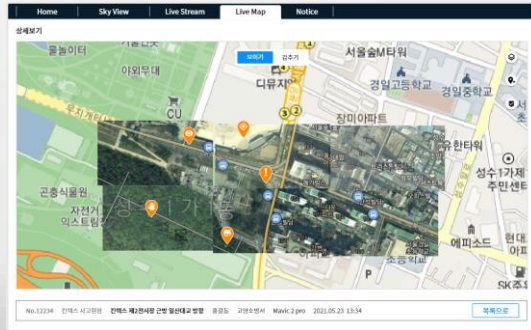
Control all types of drones with one controller APP

- One type of controller APP used to control all types of drones

- Supports drones from various manufacturers such as DJI, Pixhawk, Autel, etc.

- Supports external video transmission function through HDMI input function

- Display of nearby drones and field information on the pilot screen

Introduce
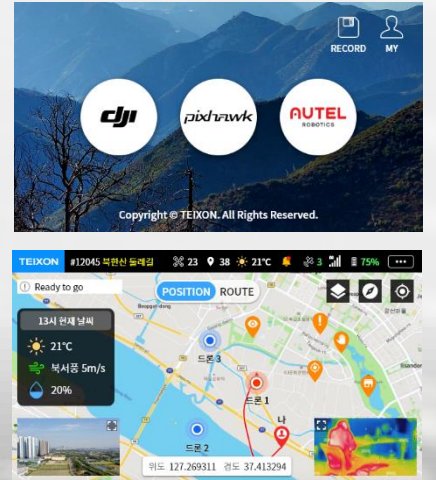
Key Benefit :

✓ It is possible to establish systematic flight plans for each site and operate drones safely.

✓ You can easily create a mission route flight and repeatedly automatically fly it, so you can check the changes in the field over time and make a database.

✓ By transmitting and storing images, location information, and flight information of multiple drones in real time, you can systematically manage drone assets.

✓ You can check the location information and the video at the same time, so the usability of the video information is very high.

✓ Accurate work orders can be given through key location point management and work announcements.

✓ Seamless business cooperation is possible by sharing video, images, and information in real time with the operator, field personnel, and control room through the web and mobile.

✓ You can quickly check on−site manpower placement and status through the location information of participating manpower and manpower, and live broadcasting on smart phones.

✓ One controller APP supports all drones of various manufacturers such as DJI, Pixhawk, Autel, etc.

Introduce
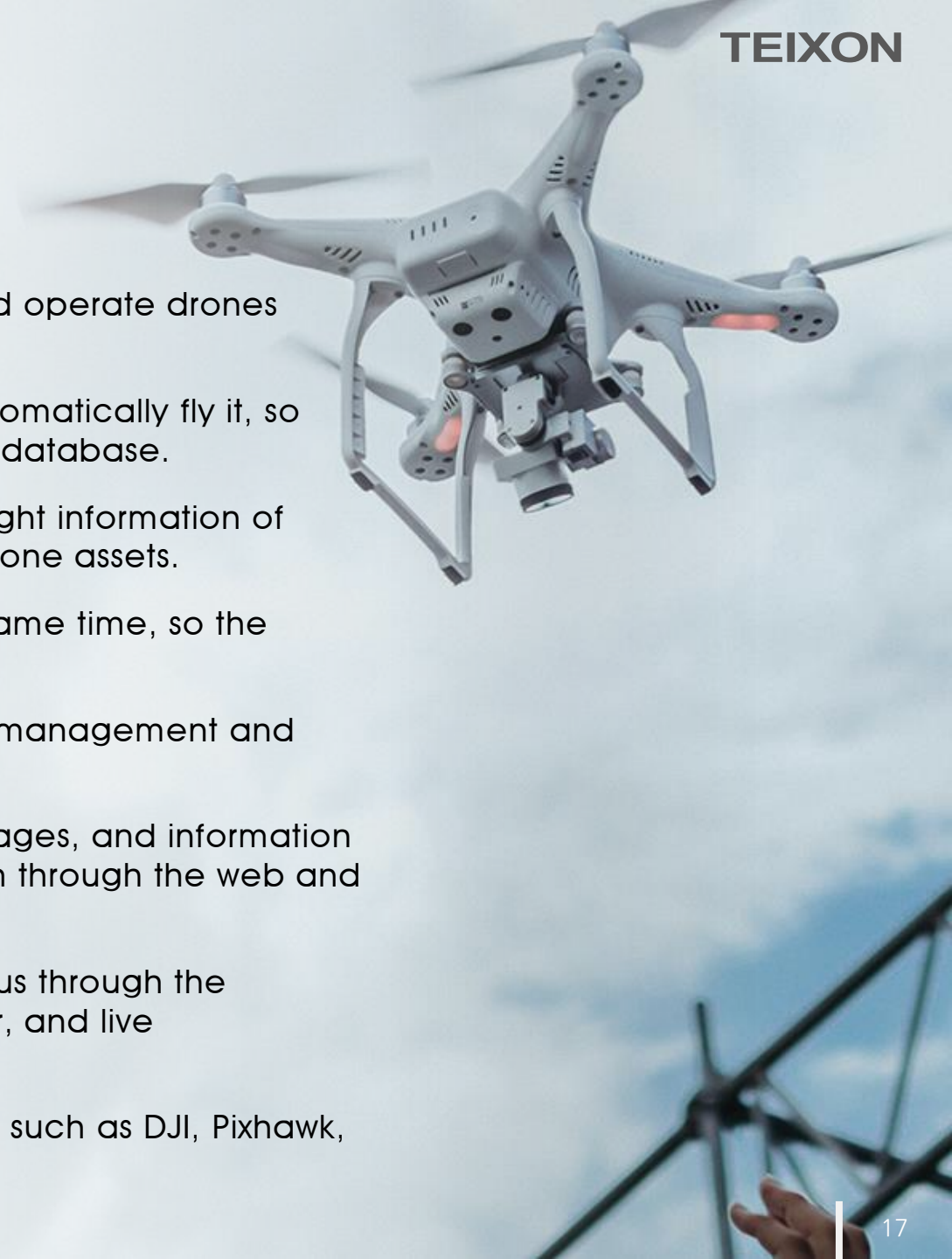
As-is To-be :

As-Is

Difficulty in real-time sharing and management of drone images and information in the field

Periodic automatic flight requires change over time

Difficult to check video and location information together

Increase in need for management such as drone asset management and history management by site

Need for convenience that can be operated by non-professional personnel

Difficult to operate with drones of various manufacturers and models

To-Be

Real-time sharing and information management for the operator, field personnel, and related parties

Easy operation through automatic route flight management function

Simultaneous playback by synchronizing location and video information

Support for automatic data collection and management by site

Supports both PC and mobile and user-friendly UI/UX

Supports various manufacturers such as DJI, Pixhawk, Autel, etc. with one control app

Introduce

Strength :

	GCS	Control system	TEIXON On−Site
info	− Hardware and software for controlling drones and planning missions.	− A solution to control and monitor the flight status of multiple drones	− An all−in−one solution that efficiently operates drones and integrates all functions necessary for steering and operation
purpose	− Drone control, steering and development analysis	− Flight status management of multiple drones	− Optimization of operation management through safe and efficient drone operation, on−site information management, and information sharing
Advantages	− For drone setting and repair and maintenance purposes	− Developed to be suitable for specific purposes for drone operation and management by business use	− All−in−one operation management possible − GCS , video control, drone control, field management, information management − Support for heterogeneous drones from various manufacturers
Feature	− FlightController control of drones − Check drone status information − Automatic control area setting and flight − Provide development debug information	− flight area setting − Safe zone setting − Drone operation information management − Drone flight log management	− Drone operation management function and automatic route flight management − Drone video and location information real−time transmission and management − On−site personnel location information, smart phone live broadcasting − Location and video information synchronization management function − Real−time information delivery

TEIXON

Strength :

	GCS or Control Monitoring	DJI FlightHub2	TEIXON On−Site
Introduce	− A solution to control and control drones	− An integrated solution for planning flight paths and running tasks efficiently	− An all−in−one solution that efficiently operates drones and integrates all functions necessary for steering and operation
Target	− Drone control, steering and development analysis − Drone operation status management	− Sophisticated flight path planning and management, business communication, content management	− Optimization of operation management through safe and efficient drone operation, field information management, and information sharing
Advantages	− For drone setting and repair and maintenance − Operational monitoring purposes	− Supports only DJI's Matrice 300 and 30 models − Excellent flight path planning function − Integrated management of captured video images	− All−in−one operation management possible − Includes all GCS , video control, drone control, field management, and information management functions − Supports drones from various manufacturers such as DJI, Pixahwk, Autel, etc.
Features	− FC control of drones − Check drone status information − Drone flight status monitoring − Automatic control area setting and flight − Provide development debug information	− Create and manage flight routes − Control video and information management − Integrated video and image management − cloud−based service	− Drone operation management function and automatic route flight management − Drone video and location information real−time transmission and management − On−site personnel location information, smart phone live broadcasting − Location and video information synchronization management function − Real−time information delivery

Introduce

Applications :

Surveillance

In the surveillance field, it's easy to miss information. With a live video time machine, you can immediately rewind video and have your records automatically saved as VODs at the same time.

Searches

Areas that drones have flown through and areas that they haven't are displayed on the map alongside areas that have been checked by site personnel and areas that haven't, making searches far more efficient.

Natural Disasters

The information sharing feature allows information to be rapidly provided to everyone including drone operators, site personnel, and control rooms.

Pest Control

When using drones to run pest control tasks in wide areas, efficient drone allocation and management of flight information can help you reduce time and costs.

Construction

At construction sites, it's crucial to keep track of task progress and history.
Site−based flight history and video information will help you manage the tasks at your construction site far more easily.

Industry

At these types of sites, you need to be able to easily view and manage drone operation information according to each department, employee, and task.

Introduce

Supported Drones:

DJI

Mavic 2 mini	Mavic Air 2s	Mavic 2 pro Mavic 2 Enterprise Advance
Phantom 4 pro	Inspire v2	Matrice 300 RTK

ARDUPILOT pixhawk

Mavlink compatible

Pixhawk 2.4.8	Pixhawk cube	Pixhawk 4

AUTEL ROBOTICS

EVO II Pro

Agriculture :

It is difficult to comprehend the large agricultural land as a whole.

Drones can be operated automatically through mission route flight over large farmland.

Simply turn on the drone, select a site, and fly, and all data will be automatically transmitted and saved.

It is difficult to check the information on the site at the same time.

The drone's video and location information can all be shared with the operator, field personnel, and manager in real time.

And, by recording and managing important location points, you can perform tasks more accurately.

It is difficult to find the location because the videos of large farmland taken by drones are similar.

Since the drone image and location information are saved together, you can immediately check the crops in a specific location.

You can also compare time series crop images from the same location.

The farmland patrol takes a lot of time and it is impossible to check the location, movement status, and movement, so there is no way for the farmer to check it.

You can track the farm patrol's location and movement in real time.

You can inform your work by delivering notices.

facility management :

It is difficult to manage outdoor facilities such as substations and base stations.

If you use a drone, you can quickly check facilities with a large area of 2000ha at once.

It allows you to quickly approach and shoot at any height, so your work time is very short.

The facility has various obstacles such as cables and wires, making it difficult to fly the drone.

The auto-route function allows you to avoid obstacles and create a route in advance to fly safely.

In addition, the created route can be reused over and over again, so that other pilots or operators can do the same job.

There is a lot of recorded data, so it is difficult to manage.

Just fly the drone and the data will be saved automatically.

The stored data can be checked through artificial intelligence analysis.

We provide data for making various reports.
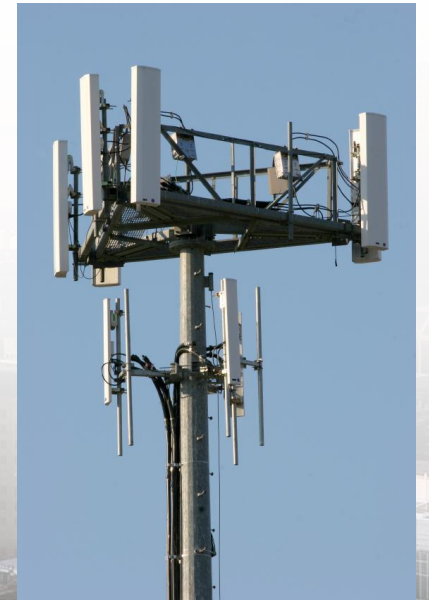
Surveillance :

Can drones be used to periodically patrol and monitor large sites?

As soon as the start of use of Taison Onsite, drone images and location information are shared to the administrator in real time.

Live video is saved and managed as VOD as soon as it ends.

You can check the area where the flight has been completed and the flight route that has not been completed, so you can work without missing a beat.

Can field officials also check while moving?

Patrols can participate in the scene at the start of the patrol to share and record the patrol route.

If necessary, you can take a video with your mobile phone and share and upload it in real time.

You can manage important locations such as caution points and search points by setting points on the map directly.

I want to manage multiple sites at the same time.

You can check the drone operation status, video, and location information from multiple sites at once.

You can use information conveniently by managing data by site.

Construction :

In a construction site that changes every day, there are limitations and blind spots to manage and supervise the site with a fixed camera.

You can create and save the flight route of the construction site and operate it using the same flight route periodically.

By checking the flight path, you can instantly see which areas are patrolled and which areas are not.

It is difficult to check information from multiple sites at once.

You can manage information for each site, and you can collect and store information from multiple sites at the same time.

You can check the status of drones in flight at various sites, so it is easy to understand the operation status.

You can automatically manage the flight history of the drone.

It is difficult to check the entire site that changes every day.

Mapping function allows you to shoot and produce orthographic images.

In particular, you can manage the site more clearly to manage the orthographic image along with the flight path.

TEIXON

Innovation of thinking