

GLOBAL SYSTEMS

Global Systems Product Introduction and Company Profile Materials

May, 2025



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A company protecting Korea's future with cutting-edge digital defense and imaging technology

Since our establishment in 2015, we have achieved sustained growth in the specialized field of video surveillance systems and continue to evolve as a technology specialist company in the imaging sector, dedicating our full capabilities to challenging new frontiers and delivering superior performance products and systems based on the technical expertise and accumulated field experience gained in domestic and international video systems markets.

In 2025, we are committed to research and development of various application systems that will lead the 4th Industrial Revolution in video surveillance systems, including new headquarters plans for cultivating new talent and securing new technologies, and development of integrated Counter-Drone Systems using Slew-to-Cue and Slew-to-Alarm with deep learning/AI technology in response to technological changes in the 5G era.

Together in Partnership For a Better Tomorrow



Customer
Priority



Respect for
Talent



Innovation and
Challenge



Core Technology
Development

Beyond Korea to global markets based on intelligent video surveillance systems: NO.1 Technology Company

Research & Development

Providing optimal solutions specialized for users based on technological capabilities in network systems and video surveillance fields

Video Surveillance System Integration

Anti-Drone Integrated System

Multi-Sensor and Radar System Integration

Video Surveillance Systems

Strategic and tactical video observation equipment and radar-integrated surveillance systems

Short-range/medium-range/long-range video surveillance equipment

Multi-function (EO+IR+SWIR) Video Surveillance Systems

Mobile Video Surveillance Systems

Integrated Logistics Support

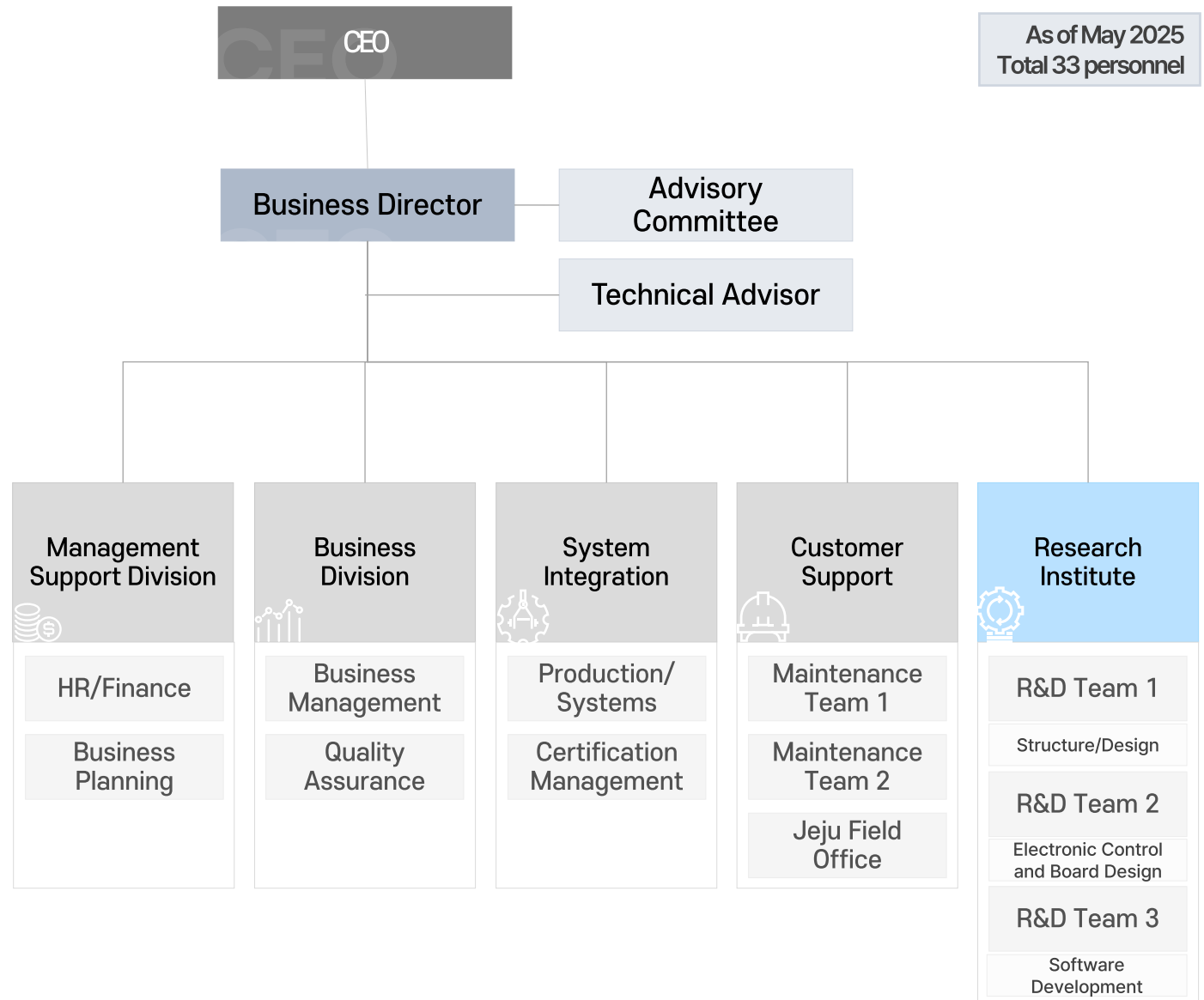
Providing comprehensive maintenance support for our proprietary video surveillance equipment and control systems based on years of research and development experience and expertise

Comprehensive Maintenance Support

Operator Training Support

Video Surveillance Equipment Parts Supply

Organization Chart



History

We are focused
on developing
core technology
for sustainable
growth

- 2025-07 - Relocated the office
- 2025-01 - Designated as "Sharing Excellence Company No. 28" by Daejeon Community Chest of Korea
- 2024-12 - Received the Daedeok Innopolis Venture Association 2024 Outstanding Daedeok Person Award
- 2024-11 - Received the Proud Female Venture Entrepreneur Commendation from Public Procurement Service Administrator
- 2024-06 - Participated in the 2024 Korea Defense Industry Development Daejeon InLex Korea Exhibition
- 2024-05 - Registered composite video surveillance device design
- 2024-05 - Registered a patent for a video surveillance device for a multi-layer composite protection system equipped with a drone jammer
- 2024-05 - Registered composite video surveillance device design (No. 30-1260565)
- 2023-11 - Selected as partner company for Daejeon Defense Venture Center
- 2023-08 - Obtained direct production confirmation for software maintenance and support services
- 2023-08 - Acquired Quality Management System ISO 9001:2015 (design, development, manufacturing, and sales of video surveillance equipment and system integration solutions)
- 2023-07 - Registered a patent for multi-layer panoramic image generation method for surveillance areas (No. 10-25526326)
- 2023-04 - Obtained direct production confirmation for information system maintenance services
- 2023-04 - Registered a patent for test jig device and portable test device for optical mechanism alignment of video surveillance device optical system (No. 10-2528733)
- 2022-12 - Conducted a paid-in capital increase
- 2022-12 - Received commendation awarded by the Minister of SMEs and Startups
- 2022-10 - Registered a patent for surveillance operation and control system with multi-surveillance target storage and search functions using panoramic images (No. 10-2453217)

History

We are focused
on developing
core technology
for sustainable
growth

- 2022-09 - Registered video surveillance device design (No. 30-1184287)
- 2022-06 - Obtained direct production confirmation for surveillance and detection equipment
- 2022-06 - Registered design for an optical device for moving target detection, and one additional item
- 2022-02 - Registered design for a video surveillance device for drone surveillance (No. 30-1155693)
- 2020-05 - Registered a patent for night laser identification system using laser diodes for video surveillance (No. 10-2115185)
- 2020-04 - Registered design for a video surveillance device for thermal imaging surveillance (No. 30-1056434)
- 2020-03 - Registered a patent for video surveillance device with contact-type connector (No. 10-2091233)
- 2019-11 - Registered a patent for user GUI-based integrated control and operation system for video surveillance devices (No. 10-2045924)
- 2019-08 - Registered design for a video surveillance device for thermal imaging surveillance (No. 30-1019527)
- 2019-05 - Registered trademark for 33 items, including CCTV cameras (4 items)
- 2018-05 - Appointed Young-ran Cho as CEO and additionally registered for the information and communication construction business
- 2018-03 - Conducted a paid-in capital increase
- 2017-05 - Relocated office (Juk-dong, Yuseong-gu → Jawoon-dong Industrial Complex, Yuseong-gu)
- 2017-01 - Registered design for thermal imaging surveillance camera (No. 30-0891960)
- 2016-03 - Received corporate research institute approval, venture company approval, and factory registration certification
- 2015-10 - Completed video surveillance equipment development (TORUSS system) and established manufacturing facilities
- 2015-04 - Established Global Systems Co., Ltd.

Major Projects

A global specialized company leading convergence systems for the 4th Industrial Revolution in future national defense

2023 ~ 2024

- Naval Logistics Command | Thermal Equipment Maintenance Services
- Jeju Provincial Police | 2025 Intelligent Coastal Perimeter System Maintenance Project
- National Police Agency | 2024 Vehicle-Mounted Thermal Imaging Surveillance Equipment Procurement Project
- Jeju Provincial Police | Vehicle-Mounted Thermal Imaging Surveillance Equipment (TOD) Procurement Project
- Defense Acquisition Program Administration | Multi-Layer Composite Protection System For Drone Response Project (Jammer-Integrated ADS-3000T Electro-Optical Tracking Device)
- Marine Corps 2nd Division | 24-K Thermal Surveillance Equipment Maintenance Services
- Marine Corps Headquarters | 23-N Day/Night Front Line Observation Equipment Manufacturing And Installation

2022 ~ 2023

- Marine Corps Headquarters | Multi-Function Video Surveillance Equipment Manufacturing/Installation Project (TORUSS-LR3000 With SWIR)
- Agency For Defense Development (ADD) | Doppler Radar Infrared Camera Replacement Project
- Jeju Provincial Police | 2023 Intelligent Coastal Perimeter System Maintenance Project
- Agency For Defense Development (ADD) | Safety Control Thermal Camera Replacement Delivery (TORUSS-LR2000)
- Marine Corps | Thermal Imaging CCTV Manufacturing Project (TORUSS-MRC1044)
- Cheongju International Airport Ground Surveillance Radar (ASDE) Procurement And Installation Project, Partial Day/Night Thermal Imaging Camera Delivery

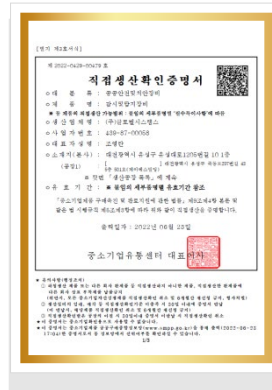
A global specialized company leading convergence systems for the 4th Industrial Revolution in future national defense

2022 ~ 2023	- Marine Corps 1st Division 23-K Thermal Equipment Surveillance System Maintenance Services
	- Marine Corps 2nd Division 23-P Thermal Equipment Outsourced Maintenance Services
	- Army Logistics Command 2022 Visible Light, Day/Night Observation Equipment (Counter-Terrorism Equipment) Procurement Project (TORUSS-MR100EOD-Vehicle-Mounted)
	- Samcheok Thermal Power Plant 23rd Security Brigade Coastal Composite System, Medium-Range Thermal Imaging Surveillance Equipment Manufacturing And Control System
2020 ~ 2021	- Jeju Provincial Police Intelligent Coastal Perimeter System Construction Thermal Observation Equipment Delivery (TORUSS-LR1000: 49 Units)
	- Electronics And Telecommunications Research Institute Remote Weapon Station Optical Device (RCWS) Control System Modification And Development R&D Project For Drone Engagement
	- Marine Corps 2021 Marine Corps Thermal Equipment Day/Night Front Line Observation Equipment (TORUSS-MR500D) Delivery
	- Yeosu Aging Industrial Complex Chemical Accident Remote Monitoring – Observation Facility EO/IR Surveillance Equipment Delivery
	- Korea Electric Power Corporation (Haenam, Hawon, Jeju Radar Sites) High-Performance Surveillance Equipment Delivery For Submarine Power Cable Vessel Monitoring
2018 ~ 2019	- Yeonghung Power Plant Headquarters Radar Position Tracking-Based Video Surveillance System Delivery
	- Electronics And Telecommunications Research Institute High-Performance Thermal Imaging Surveillance Equipment Manufacturing And Delivery For Drone Tracking
	- Marine Corps High-Performance Thermal Equipment Surveillance System Maintenance Services
2015 ~ 2017	- Marine Corps Headquarters Frontline Observation Equipment Outsourced Maintenance (TORUSS-MR Series)
	- Naro Space Center Video Surveillance Equipment, Network Equipment Procurement, And Installation Project
	- Coastal Composite Surveillance Equipment Manufacturing And Installation Following Military Fence Removal On The Gangwon-Do East Coast
	- Marine Corps Headquarters Day/Night Front Line Observation Equipment Manufacturing And Delivery (TORUSS-MR300D)

Company Overview and Corporate Status

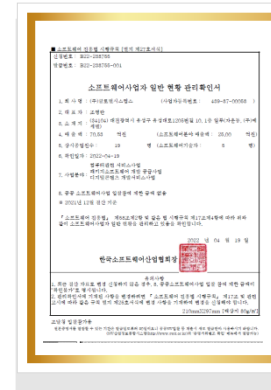
Global Systems Co., Ltd. Qualifications and Certifications Status

SBDC 중소기업유통센터
Small & Medium Business Distribution Center



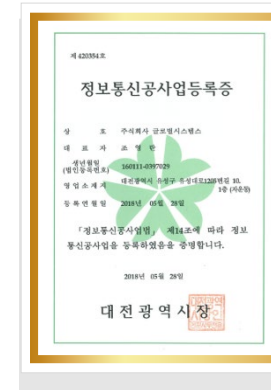
Direct Production
Confirmation Certificate

SWTT SW산업정보종합시스템
Software Industry Information System



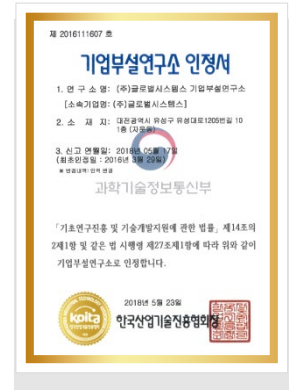
Software Business Report
Confirmation Certificate

대전광역시
DAEJEON METROPOLITAN CITY



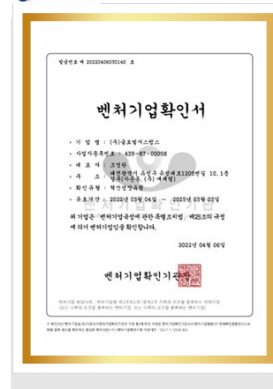
Information and
Communication
Construction Business
Registration Certificate

koita 한국산업기술진흥협회
Korea Industrial Technology Advancement Association



Corporate Research
Institute Recognition
Certificate

중소벤처기업부
Ministry of Small and Medium Enterprises



Venture Business
Confirmation Certificate

biz 여성기업 종합정보망
Women-Owned Business Information Network



Women-Owned
Business Confirmation
Certificate

KEC 한국ESG인증협회
Korea ESG Certification Association



Quality Management
System Certificate

Company Overview and Corporate Status

Global Systems Co., Ltd. Qualifications and Certifications Status (continued)



Korea Intellectual Property Office | Technology Patents



No. 10-2045924



No. 10-2091233



No. 10-2115185



No. 10-2453217



No. 10-2528733



No. 10-2552326



No. 10-2667607

- User GUI-based Integrated Control and Operation System for Video Surveillance Devices
- Video Surveillance Device with Contact-type Connector
- Night Laser Identification System with Enhanced Night Identification Performance and Remote Operation Capability Using Laser Diodes for Video Surveillance
- Surveillance Operation and Control System with Multi-surveillance Target Storage and Search Functions Using Panoramic Images
- Test Jig Device and Portable Test Device for Optical Mechanism Alignment of Video Surveillance Device Optical System
- Multi-layer Panoramic Image Generation Method for Surveillance Areas
- Video Surveillance Device for Multi-layer Composite Protection System Equipped with Drone Jammer

Company Overview and Corporate Status

Global Systems Co., Ltd. Qualifications and Certifications Status (continued)



Korea Intellectual Property Office | Trademark Registration Certificate



No. 40-1261968



No. 40-1278213



No. 40-1590007



No. 40-1598589

Company Overview and Corporate Status

Global Systems Co., Ltd. Qualifications and Certifications Status (continued)



Korea Intellectual Property Office | Design Registration Certificate



No. 30-0891960 호



No. 30-1019527



No. 30-1056434



No. 30-1155693



No. 30-1169443



No. 30-1169455



No. 30-1184287

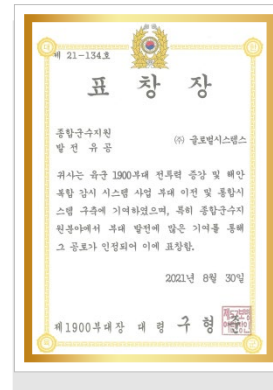


No. 30-1260565

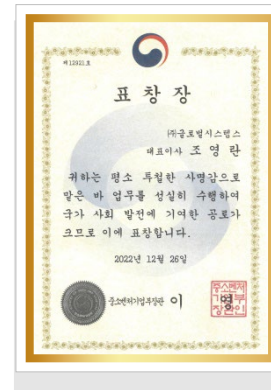
Company Overview and Corporate Status

Global Systems Co., Ltd. Commendations and Letters of Appreciation

| Commendations and Letters of Appreciation



Global Systems Co., Ltd.
Commendations and
Letters of Appreciation



Ministry of SMEs and Startups
| Commendation



Proud Female Venture Entrepreneur
| Commendation



Jeju Police Chief
| Letter of Appreciation



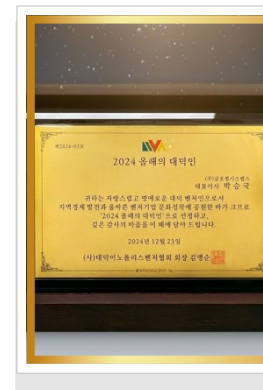
2023 Yuseong-gu Office
Commendation



2024 Yuseong-gu Office
Commendation



2024 Yuseong-gu Office
Civil Administration
Commendation



2024 Outstanding
Daedeok Person



2025 Selected as
the 28th Member of
the Honorary Giving
Company Program

Company Overview and Corporate Status

Global Systems Co., Ltd. Sales Status and Credit Rating

2024 Company Management Sales Status and Corporate Vision

[Unit: Thousand KRW]

Category		2020	2021	2022	2023	2024	2025 (Projected)	Remarks
Sales by Sector	Information and Communication Construction	1,700,068	5,548,774	2,938,128	3,134,182	4,275,050	500,000,000	Order Backlog 5.81 billion KRW
	Software Development	397,876	100,565	47,775	147,325	192,855	300,000	
	Engineering	815,753	409,318	195,123	217,253	184,860	300,000	
	Manufacturing	3,054,453	995,223	1,382,096	1,527,691	1,851,785	580,000,000	
	Personnel	15	15	18	22	24	45	29 people as of March 2025
	Sales	5,968,150	7,053,880	4,563,122	5,026,451	6,722,113	1,140,000,000	2025 target 11.4 billion KRW
	Growth Rate	373.6%	118.2%	64.7%	112.8%	129.3%	300%	
	R&D Expenses	643,336	1,604,939	1,175,080	1,020,747	1,246,877	1,500,000	

Global Systems Credit Rating

Company Name	Global Systems Co., Ltd.
Rating Agency	NICE Information Service Co., Ltd.
Corporate Credit Rating	BB0
Rating Date	June 28, 2024
Rating Validity Period	June 27, 2025





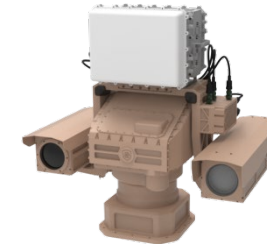
RCWS Optical Device
Localization Modification/
Research & Development



TORUSS-LR900Z



TORUSS-LR3000/HDC
with SWIR



TORUSS-ADS3000T



TORUSS-LR2000/HDC



TORUSS-LR1000-IR690



TORUSS-LR1000-IR735



TORUSS-MR-500D



TORUSS-MR-500ND



TORUSS-MR-300ND



TORUSS-MR-300ND



TORUSS-MR300ND-G



TORUSS-MR300A



TORUSS-MR100D



TORUSS-MR100EOD

A video specialist solution company
that directly develops, produces, and supplies domestically

TORUSS-MR300ND		TORUSS-MR500D		TORUSS-LR1000		TORUSS-LR2000		TORUSS-LR3000	
									
Short to Medium-Range Video Surveillance Equipment (Coastal Integrated Surveillance System)		Medium to Long-Range Video Surveillance Equipment (Day/Night Front Line Observation Equipment)		Long-Range Video Surveillance Equipment		Long-Range Video Surveillance Equipment		Low-Visibility Multi-Function Long-Range Video Surveillance Equipment	
Uncooled 100~225mm thermal imaging		Uncooled thermal imaging/cooled thermal imaging compatible		Cooled thermal imaging camera		HDC cooled thermal imaging camera		HDC cooled thermal imaging camera	
Daytime	10~150mm (optional)	Daytime	500~750mm (optional)	Daytime	750~1,000 mm (optional)	Daytime	HDC 2,000mm ((optional)	Daytime	HDC 2,000mm (optional)
Option	IR illuminator (optional)	Option	Laser Range Finder (LRF)	Option	Laser Range Finder (LRF)	Option	Laser Range Finder (LRF)	Option	Laser Range Finder (LRF)
Drive Device	Harmonic precision drive system	Drive Device	Harmonic precision drive system	Drive Device	Harmonic precision drive system	Drive Device	Harmonic precision drive system	Drive Device	Harmonic precision drive system

TORUSS-MR100EOD **Visible Light** Day/Night Observation Equipment

Day/Night Camera

- Visible light and near-infrared imaging observation device
- 19mm / 1 field of view (FOV)
- 8x high resolution: 640x512 Pixels
- FOV: Horizontal 30° x Vertical 25° @ 150m

HD Daytime Camera

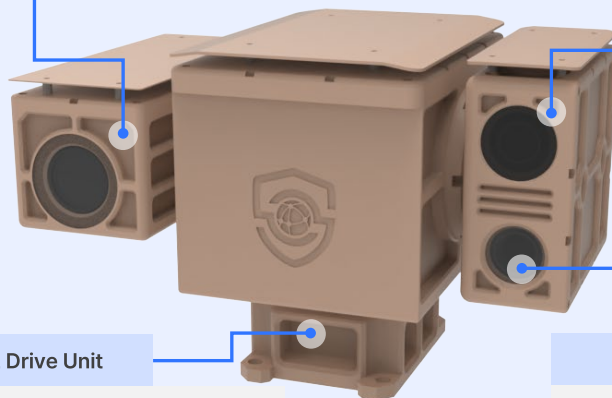
- HD Zoom Lens / IP Camera
- Focal Length : 84.6mm (21X)
- High Resolution : 1920x1080 Pixels
- Fields of View : 55°(H) x 40°(V) @ 1Km

Pan & Tilt Drive Unit

- Azimuth/elevation precision drive device
- Azimuth: 360° continuous rotation, 60°/sec
- Elevation: -60°/+60°, 30°/sec
- Accuracy: 0.05°

Infrared Laser

- 800m Infrared Laser Light / 940nm 5W
- Fields of View : 65°(H) x 2°(V) @ 600m



TORUSS-MR300ND **Short-Range** Thermal Observation Equipment (For Coastal Integrated Surveillance)

Daytime (EO) Camera

- 1/2" CMOS sensor (TTA certified product)
- 1920(H)x1080(V) pixels
- 30fps (Max 60fps)
- H.264, H.265, M-JPEG
- Image stabilization (gyro sensor applied)
- Backlight compensation (BLC, WDR, SSDR)

Uncooled (IR) Camera

- 30~150mm/5x optical continuous zoom/4x digital zoom
- 17um pixel pitch
- ≤30mk or less
- Image enhancement function equipped

Pan & Tilt Drive Unit

- Pan: 360° continuous rotation
- Pan speed: 0.01 ~ 60°/sec
- Tilt: -70° ~ +45°
- Rotation speed: Up/down: 30°/sec, Left/right: 60°/sec
- Rotation angle resolution: 0.05°



600m personnel identification



1km harbor vessel identification



1km 30cm figure identification



500m figure identification



1.2km figure identification

TORUSS-MR500ND Medium-Range Video Surveillance Equipment (For Coastal Integrated Surveillance System)

TORUSS-MR500D Medium-Range Thermal Imaging Surveillance Equipment

Daytime (EO) Camera

- Full HD 2MP integrated zoom camera
- 278mm (44x) optical zoom
- Built-in remote control wiper module

SWIR & Defog Feature

Uncooled (IR) Camera

- 225mm optical 9x optical zoom
- 640 resolution/Defog function

Pan & Tilt Drive Unit

- Pan: 360° continuous rotation
- Pan speed: 0.01 ~ 60°/sec
- Tilt: -90° ~ +90°
- Tilt speed: 0.01 ~ 30°/sec
- Rotation precision: 0.01°

Laser Range Finder (LRF) (Optional)

- Laser Class-1 Eye safe
- Max Range : 25m~30km up to
- MTBF : 500,000 Shot

Uncooled (IR) Camera

- Resolution: 640x512
- LWIR 150/225mm/300mm optical zoom

GPS & DMC Surveying Feature

- Global Positioning System
- DMC (Digital Magnetic Compass) module equipped

Daytime (EO) Camera

- Full HD 2MP camera
- 1,040mm (66x) optical zoom
- Built-in remote control wiper module

SWIR & Defog Feature

Pan & Tilt Drive Unit

- Pan: 360° continuous rotation
- Pan speed: 0.01 ~ 60°/sec
- Tilt: -60° ~ +60°
- Tilt speed: 0.01 ~ 50°/sec
- Rotation precision: 0.01°

Laser Range Finder (LRF): Optional

- Laser Class-1 Eye Safe
- Max Range: 25 m~30 km up to
- MTBF: 500,000 Shots
- Remote control wiper assembly



1km personnel identification



3.4km harbor vessel identification



Daytime (EO) camera
(3km/swimming infiltration personnel
identification): Wide FOV



Daytime (EO) camera
(3km swimming infiltration personnel
identification): Narrow FOV

TORUSS-LR1000 Long-Range Video Surveillance Equipment

Cooled Thermal Imaging (IR) Camera

- Thermal Camera (TOD)
 - 735mm optical continuous zoom
 - Auto focus & DDE function
 - Resolution: 640x512
 - Detection Range
- Personnel: 18.8km
- Vehicle: 22.8km
- Vessel: 25km

GPS & DMC Surveying Feature

- Global Positioning System
- DMC (Digital Magnetic Compass) module equipped

High-Performance Day/Night Camera (EO)

- Day/Night, Megapixel HD
 - 1/2" HD network camera
 - Resolution: 1920(H)×1080(V)
- Sensor Control Board (SCB)

High-Performance Motorized Zoom Lens

- HD Motorized Zoom Lens
- Focal length: 1,040mm (66x)
- Day/Night, 2 Megapixel (HD)
- Motorized zoom Auto Focus function

Motion Control Board (MCB)

- Motor communication and precision position control
- High/low temperature automatic adjustment function
- Built-in automatic heater (5°C)

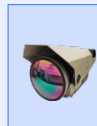
Pan & Tilt Drive Unit

- Pan: 360° continuous rotation
- Pan speed: 0.01 ~ 60°/sec
- Tilt: -90° ~ +90°
- Tilt speed: 0.01 ~ 50°/sec
- Rotation precision: 0.001°



Laser Range Finder (LRF): Optional

- Laser Class-1 Eye Safe
- Max Range: 25 m~30 km up to
- MTBF: 500,000 Shot
- Remote control wiper assembly



- Thermal camera optional specifications: Drone detection, dedicated thermal
- HDC (1280 resolution) option: 800mm/1200mm

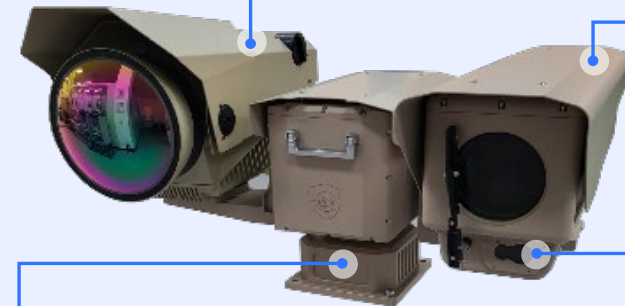
TORUSS-LR2000 Long-Range Video Surveillance Equipment

Night Thermal Imaging (IR) HDC Camera

- HDC 1,000mm or more
- Output resolution: 1280 pixels or more, HDC InSb Focal Plane Array
- Display Format: 16:9

Daytime (EO) HD Optical Zoom Camera Assembly

- 1,000mm or more, Full HD IP Camera
- AF function, EIS image stabilization, NIR Anti Fog S/W & H/W function
- GPS (Global Positioning System)
- DMC (Digital Magnetic Compass)

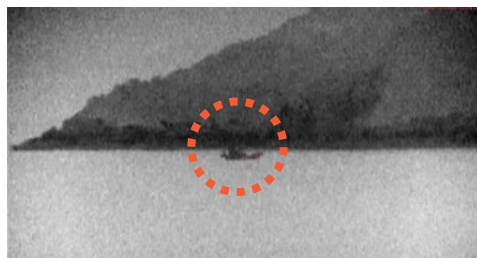


Pan & Tilt Drive Unit

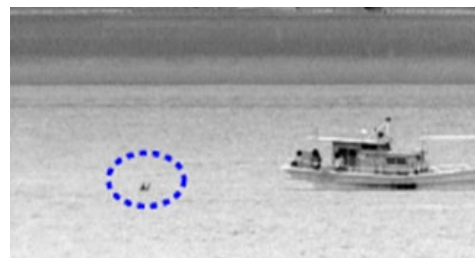
- Pan: 360° continuous rotation
- Pan speed: 0.01 ~ 60°/sec
- Tilt: -90° ~ +90°
- Tilt speed: 0.01 ~ 50°/sec
- Rotation precision: 0.001°

Laser Range Finder (LRF)

- Maximum measurement distance: 25m to 20,000m up to
- Military coordinate 8-level integrated system function



17km vessel target identification image



3km personnel target identification image




Daytime (EO) camera/3km/ drone recognition



Night thermal camera/3km/ drone recognition

TORUSS-LR3000 Long-Range Video Surveillance Equipment



Night Thermal Imaging (IR) HDC Camera

- HDC 1,000mm or more
- Output resolution: 1280 pixels or more, HDC InSb Focal Plane Array
- Display Format: 16:9

Short Wave Infrared (SWIR) HD Camera

- 1,000mm or more
- Output resolution: 1280 pixels or more/HD Resolution
- Sensor pixel size: 10μm x 10μm
- Applied wavelength band: 0.9~1.7nm

Daytime (EO) HD Optical Zoom Camera

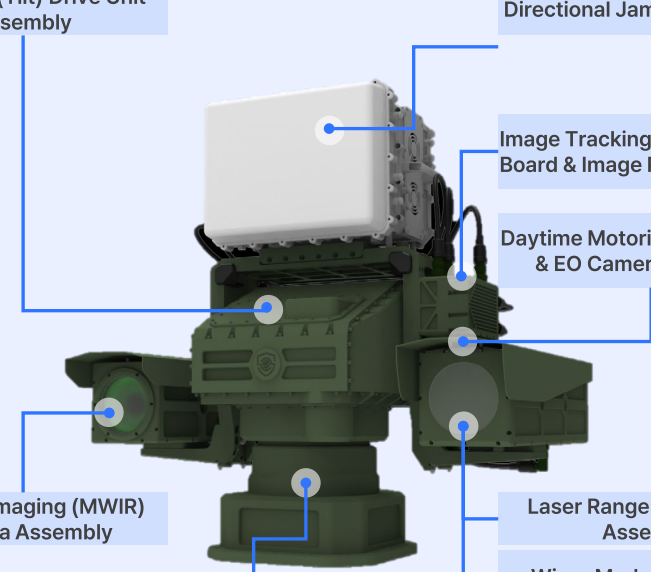
- 1,000mm or more/Full HD IP Camera
- AF function, EIS image stabilization, NIR Anti Fog S/W & H/W function
- GPS (Global Positioning System)
- DMC (Digital Magnetic Compass)

Laser Range Finder (LRF)

- Maximum measurement distance: 25m to 30,000m up to
- Military coordinate 8-level integrated system function

Pan & Tilt Drive Device

TORUSS-ADS3000T Long-Range Video Surveillance Equipment



Elevation (Tilt) Drive Unit Assembly

Directional Jammer Assembly

Image Tracking DSP Electronic Board & Image Processing Unit

Daytime Motorized Zoom Lens & EO Camera Assembly

Thermal Imaging (MWIR) Camera Assembly

Laser Range Finder (LRF) Assembly

Wiper Module Assembly

(Pan) Drive Unit Assembly
-360 degree continuous rotation



Daytime (EO) Camera
(3km/swimming infiltration personnel identification): Wide FOV



Daytime (EO) Camera
(3km swimming infiltration personnel identification): Narrow FOV



Small drone detection/tracking function
(AI deep learning inference method)

A mobile video surveillance system that can be efficiently utilized in the field



MVCCS

Mobile Vehicle Command & Control System

- Remote video control/recording system
- Solar power generation system
- Dual power configuration (emergency generator mounted)
- High-performance wireless communication system
- Weather observation and DGPS system



MVSS

Mobile Vehicle Surveillance System

- 6m electronic mast system
- Long-range video surveillance system
- Radar system
- Wireless video transmission system
- Weather observation and DGPS system
- Video surveillance monitoring system



MTSS

Mobile Vehicle Trailer Surveillance System

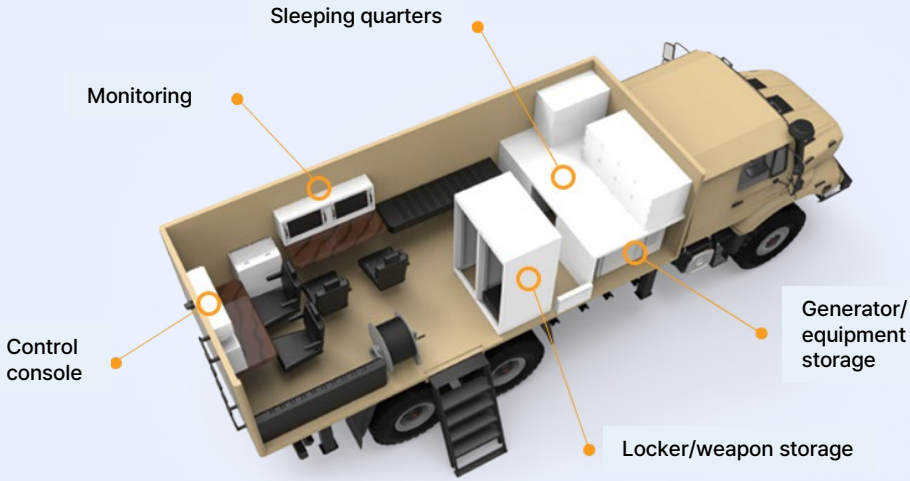
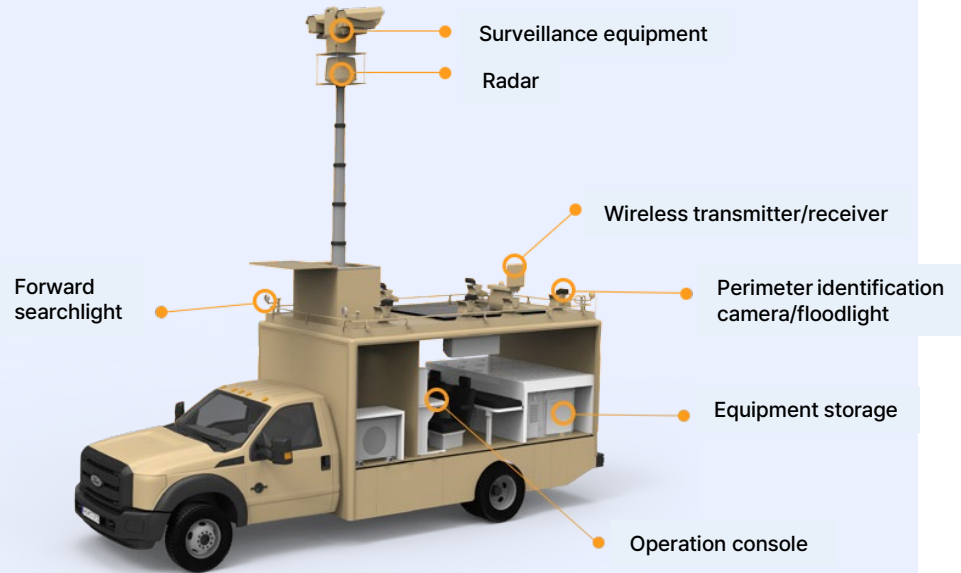


- 6m electronic mast system
- Long-range video surveillance system
- Radar system
- Wireless video transmission system
- Weather observation and DGPS system
- Video surveillance monitoring system

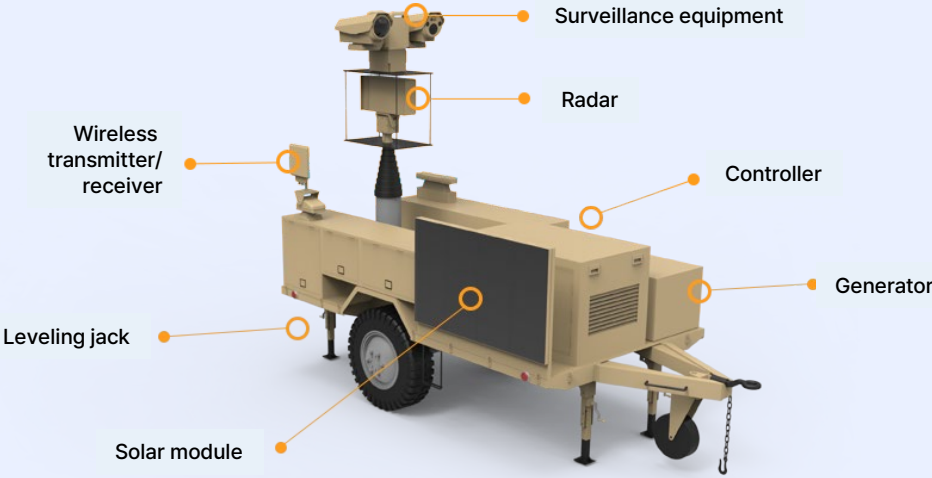
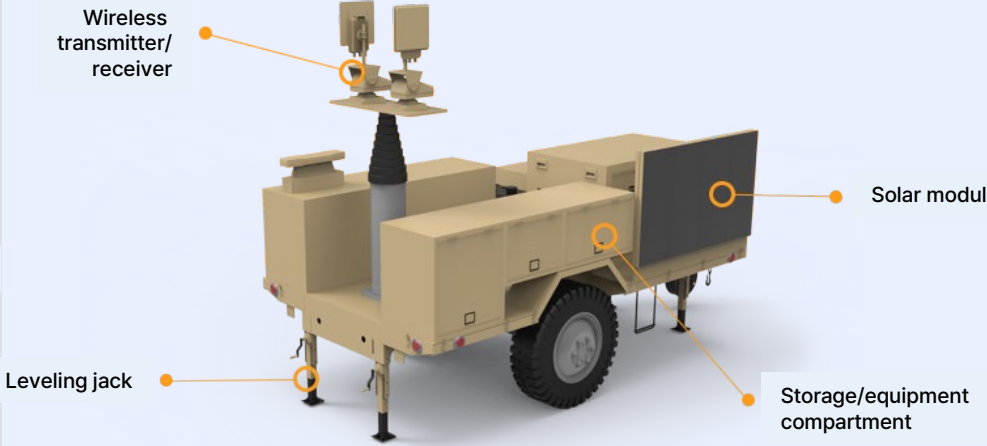

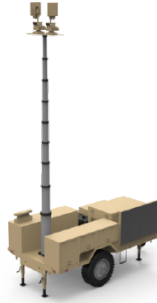


MTCS

Mobile Vehicle Trailer Communication System

- Wireless video relay system
- 10m electronic mast system
- Directional wireless PTZ system

<div data-bbox="125 240 197 331"> </div> <div data-bbox="553 268 680 304">MVCCS</div>	<div data-bbox="1554 268 1659 304">MVSS</div>
<div data-bbox="322 360 913 399">Mobile Vehicle Command & Control System</div>	<div data-bbox="1366 360 1854 399">Mobile Vehicle Surveillance System</div>
 <p>Labels for MVCCS:</p> <ul style="list-style-type: none"> Monitoring Sleeping quarters Control console Generator/equipment storage Locker/weapon storage 	 <p>Labels for MVSS:</p> <ul style="list-style-type: none"> Surveillance equipment Radar Wireless transmitter/receiver Perimeter identification camera/floodlight Equipment storage Operation console Forward searchlight
 <ul style="list-style-type: none"> - The mobile command and control system is developed for use in perimeter surveillance system sites that are built for short-term or temporary purposes. - Multiple video surveillance systems can be controlled according to user requirements, and some video can be transmitted externally. 	 <ul style="list-style-type: none"> - The mobile video surveillance system is designed to enable efficient perimeter surveillance operations in areas with limited perimeter surveillance or incident areas. - Video acquisition according to situations is possible through 6m mast height adjustment, and response to surrounding perimeter situations is possible through additional radar mounting, etc.

<div>02</div> <div>MTSS</div>	<div>MTCS</div>
Mobile Vehicle Trailer Surveillance System	Mobile Vehicle Trailer Communication System
	
 <ul style="list-style-type: none"> - The mobile trailer video surveillance system is designed to enable efficient perimeter surveillance operations in areas with limited perimeter or incident areas. - Video acquisition according to situations is possible through 6m mast height adjustment, and response to surrounding perimeter situations is possible through additional radar mounting, etc. - Remote video observation is possible, and it is impossible to confirm where the user is observing from. 	 <ul style="list-style-type: none"> - The mobile trailer communication relay system is designed to perform relay functions during long-distance video transmission. - It can be optimized for situations and environments through 10m mast height adjustment, and data can be linked to specific areas using directional wireless antennas.

TOD Vehicle-Mounted Thermal Imaging Surveillance Equipment

Vehicle mounted Thermal Observation Device

Intelligent vehicle-mounted thermal imaging surveillance equipment for establishing a complete coastal perimeter surveillance system in conjunction with fixed thermal imaging surveillance equipment (TORUSS-LR1000) for coastal perimeter already operated by the National Police Agency Coast Guard, and reinforcing blind spots in coastal surveillance in the responsibility areas

Daytime Optical (EO) Camera

- Resolution: $1920 \times 1080 = 2\text{M}$ Pixels
- Optical distance: 1,000mm or more (66x optical)
- Focus control: Auto Focus/manual adjustment

Night Thermal Imaging (IR) Camera

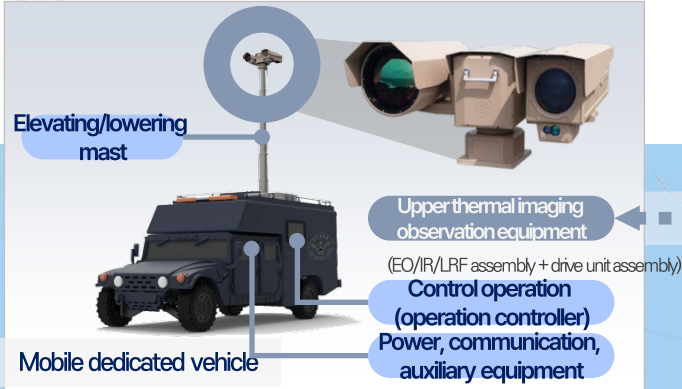
- Resolution: 640×512
- Focal Length: 35mm ~ 390mm (19x optical zoom, $\times 8$ digital zoom)
- Focus control: Auto Focus/manual adjustment



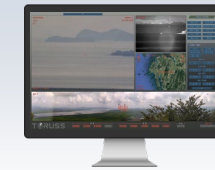
Exterior

- Vehicle: 1875(W) x 3145(H) x 6250(D)
- Surveillance equipment: 800(W) x 410(H) x 730(D)

1. Vehicle-Mounted Thermal Observation Equipment

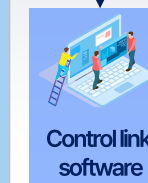


2. Real-time Remote Control Software



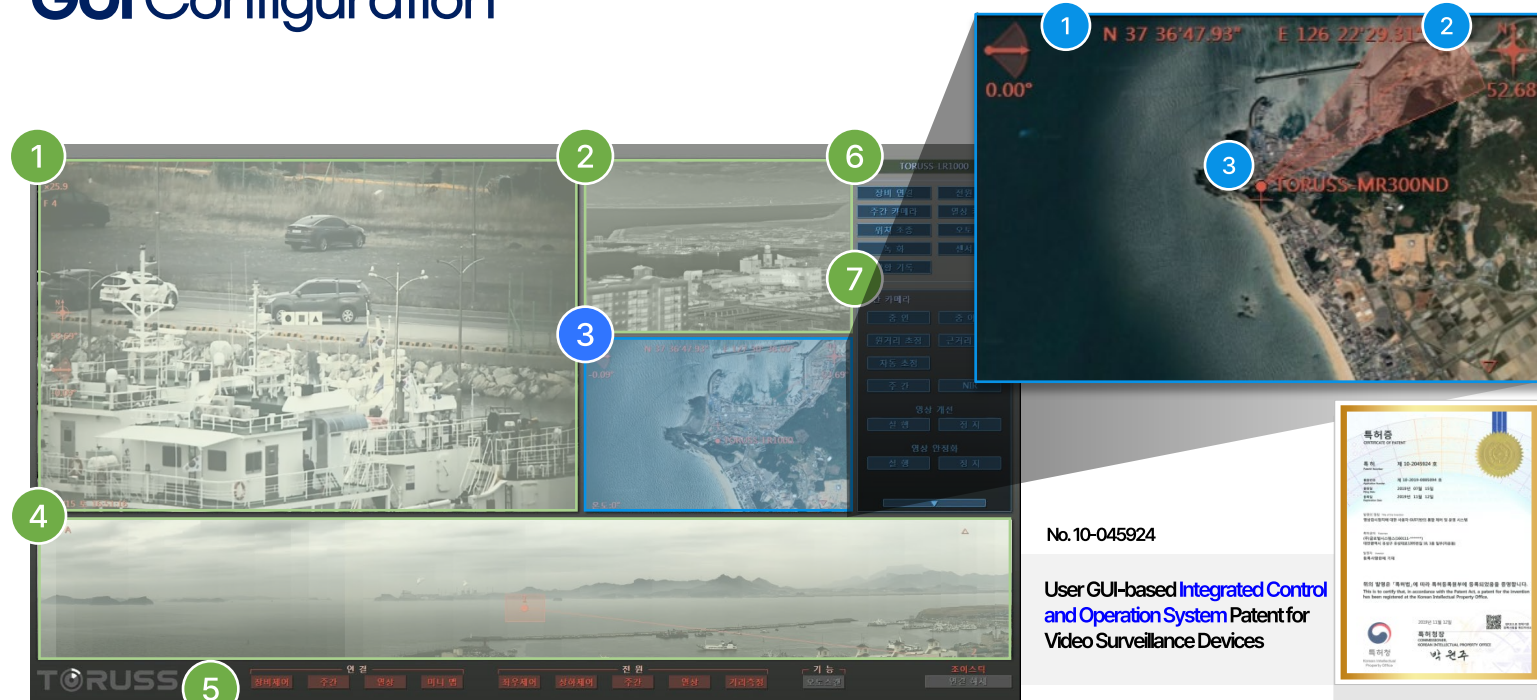
LTE Transmission
(Security encryption)

3. Control Center Comprehensive Situation Room Remote Control Construction



- ▶ Rugged Remote Control Mobile Vehicle Surveillance System
- ▶ Military specification mobile trailer system
- ▶ 5.5m electro-mechanical mast system
- ▶ Long-range ground surveillance radar equipped
- ▶ Multi-sensor long-range HDC thermal imaging surveillance device equipped
- ▶ Long-range wireless communication system
- ▶ Rugged laptop maintenance system
- ▶ DGPS and weather condition monitoring system equipped
- ▶ Garrison perimeter alarm LED CCTV monitoring system

Video Surveillance System Operation GUI Configuration



No. 10-045924


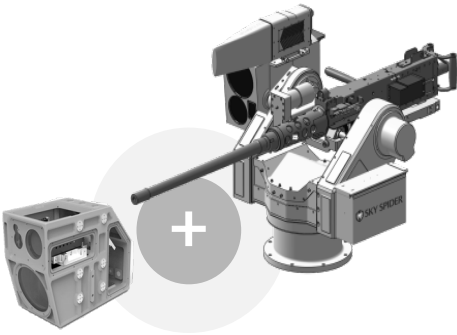

User GUI-based Integrated Control and Operation System Patent for Video Surveillance Devices



No.	Name	Content
1	Main Screen	Real-time video playback of primary surveillance camera (switchable to auxiliary screen, electronic map)
2	Auxiliary Screen	Real-time video playback of auxiliary camera (switchable to main screen, electronic map)
3	Electronic Map	Display of a map around surveillance equipment and observation direction (switchable to main screen, auxiliary screen) Display of elevation angle, azimuth, latitude/longitude, military coordinates, etc., pan operation via mouse click
4	Panorama	Display of a 360° image around surveillance equipment and observation direction Pan-tilt operation to mouse click point
5	Status Bar	Communication connection, power and operation status display
6	Control Menu	Camera and function selection menu
7	Detail Menu	Detail menu display according to control menu

No.	Name	Content
1	GPS/Coordinates	<ul style="list-style-type: none"> Video surveillance device location display - GPS-linked coordinates - Latitude/longitude coordinate display - GPS coordinate conversion
2	Azimuth	<ul style="list-style-type: none"> Camera pointing direction display
3	Zoom/Focus	<ul style="list-style-type: none"> Camera zoom status display (sector angle increase/decrease) Camera focus status display (sector arc movement)

We focus on core technology development for sustainable growth

TORUSS-LR900Z(EO/IR)	RCWS Remote Weapon Control System for Drone Engagement	TORUSS-ADS 3000T with Jammer
		
Doppler Radar Infrared Camera	Anti-Drone System	Multi-layer composite protection system for drone response long-range electro-optical tracking equipment (EO/IR)
Uncooled 100~225mm thermal imaging	Uncooled thermal imaging/cooled thermal imaging compatible	Cooled thermal imaging camera
<ul style="list-style-type: none"> → Doppler radar sensor → Integrated zoom daytime (EO) camera → Cooled infrared (IR) camera → MIL-STD connector used 	<ul style="list-style-type: none"> → Low-altitude drone surveillance radar → Drone detection integrated sensor (EO/IR+RCWS) → Day/night multi-sensor thermal imaging surveillance system → Electronic warfare system (Soft Kill) + RCWS (Hard Kill) 	<ul style="list-style-type: none"> → Tactical aviation surveillance radar → UAV signal detection RF sensor → Precise position detection by AESA Doppler radar → Day/night multi-sensor thermal imaging surveillance system → Electronic warfare system (jamming/GPS frequency disruption)



TORUSS-LR3000-EO/IR with SWIR
Low-visibility multi-function long-range observation equipment (mass production model)

(Long Range- Linear cooled Detector)
640 x 480 Pixels



TORUSS-LR3000 ADS 3000T
Anti-drone multi-layer drone response electro-optical tracking device

(Long Range- Linear cooled Detector)
640 x 480 Pixels



TORUSS-900Z
Projectile tracking long-range video surveillance equipment

(Long Range- Linear cooled Detector)
1280 x 1024 Pixels



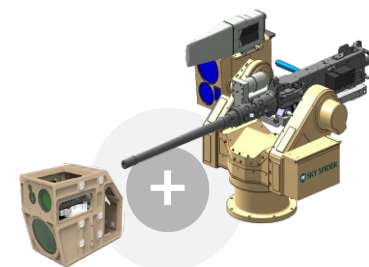
TORUSS-ADS Gimbals-290
Gimbal-type mobile video equipment

(Long Range- Linear cooled Detector)
640 x 480 Pixels



TORUSS-LR3000-ATS
Analysis Tracking System
Spectrum analysis tracking equipment

(Long Range- Linear cooled Detector)
1280 x 1024 Pixels

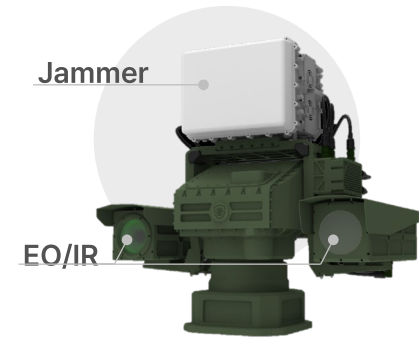
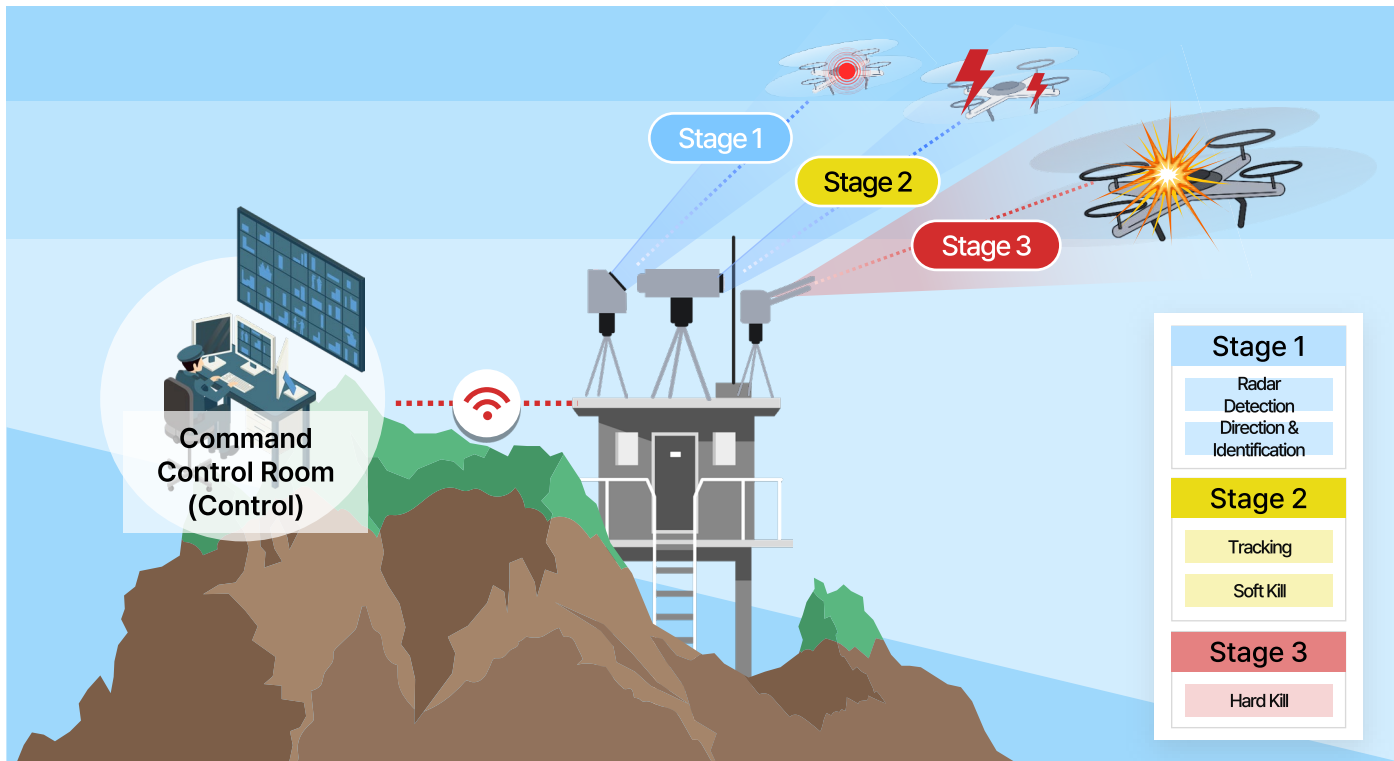


TORUSS-ADS-IR450/ EO/IR
Wheeled RCWS optical device
Localization modification/research & development

(Long Range- Linear cooled Detector)
Multi-FOV/ 640x480 Pixels

Anti-Drone Integrated System

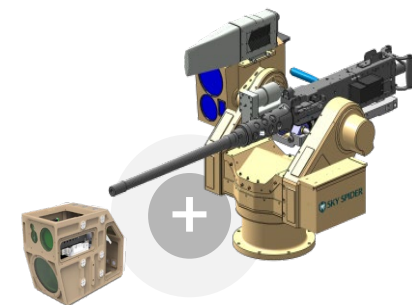
The anti-drone integrated system for critical areas is a facility-type drone protection system designed to defend against drone attacks targeting major facilities of the Army, Navy, and Air Force, including bases and naval ports, by detecting and identifying small unmanned aircraft penetrating airspace and then disabling them through electronic warfare.



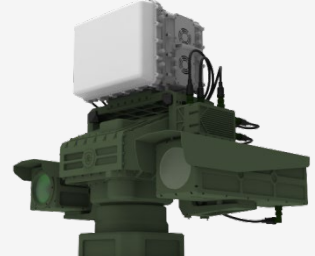
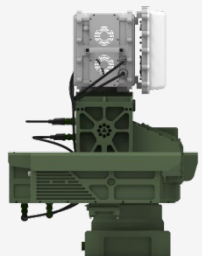
TORUSS-ADS 3000T with Jammer



TORUSS-LR3000-EO/IR with SWIR

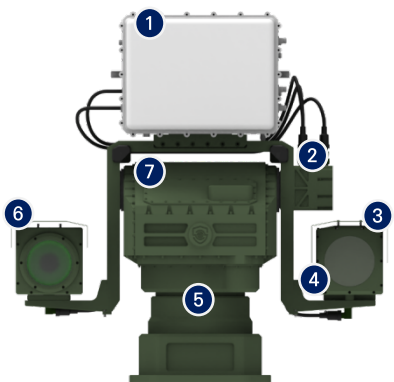


TORUSS-ADS-IR450/EO/IR



Overview

TORUSS-ADS-3000T Components



1	Directional Jammer Assembly
2	Image Tracking DSP Electronic Board & Image Processing Unit
3	Daytime Motorized Zoom Lens & EO Camera Assembly
4	Laser Range Finder (LRF) Assembly Wiper Module Assembly
5	Pan Drive Unit Assembly - 360-degree continuous rotation
6	Thermal Imaging (MWIR) Camera Assembly
7	Elevation (Tilt) Drive Unit Assembly

- Zero backlash harmonic reducer equipped, enabling high-precision control
- High-torque BLDC motor for stable operation even during disturbances such as strong winds/heavy snow
- Camera module detachable structure for easy replacement and maintenance
- 1/2" high-sensitivity sensor and 15.8~1040mm high-magnification zoom lens for near/long-range surveillance optimization
- Enhanced image quality implementation using NETD 20 mK, 640x512 resolution thermal sensor, HD-grade image output through Upscale technology
- IP66 grade waterproof/dustproof, MIL-STD-461G, MIL-STD-810G certification for durability verification
- Embedded image tracking device integration, improved tracking accuracy through reduced image delay

+ 1010(W) x 992(H) x 730(D)

+ Weight : 145kg

Jammer not included





Category			Development Performance	TORUSS-900Z(EO/IR)
Main Body	Detector	Sensor Element	Cooled InSb	
		Pixel Pitch		
		Wavelength	3 μ m ~ 5 μ m(MWIR)	
		Cooler MTBF	10,000h or more	
Lens	Output	Video (Image)	1280x720	
	Environmental Conditions		IP66, high/low temperature/salt spray certification	
	Interface		RS-232 / RS-422 / Ethernet, etc.	
	Focal Length		75~900mm	
	FOV		0.8~9.6	
	Zoom		12x, 8x digital zoom	
	Focus Adjustment		Auto Focus and Manual Focus	
	Additional Functions		Auto Gain Control(AGC) Digital Detail Enhancement(DDE) Noise reduction Sharpness enhancement Image stabilization	

Overview

- HD resolution cooled thermal imaging camera integration
- IR window and protective cover application for protecting expensive thermal imaging lenses
- Enhanced NUC (Non-Uniformity Correction) performance through remote protective cover opening/closing function
- High sensitivity and stability provided by low-noise, high-reliability linear Stirling cooler
- Remote control precision alignment device integration for easy alignment adjustment with tracking radar
- IP66 grade waterproof/dustproof, MIL-STD-810G certification for durability verification

+ 488(W) x 405(H) x 599(D) + Weight: 36.5kg



* Installation at 200m or more above sea level, 40km observation conditions

Category	(ROKMC) Low-Visibility Multi-Function Long-Range Video Surveillance System Manufacturing/Installation Project Main Specifications
Day/Night Detection Performance	<ul style="list-style-type: none"> Daytime (EO) camera: Target size: NATO: 2m×2m / Vehicle/vessel: 3m×6m - Detection range (vehicle/vessel): 40km / Recognition range (vehicle/vessel): 30km / Identification range: 20km Night (IR) camera: Detection range: 40km / Recognition range (vehicle/vessel): 30km / Identification range: 20km Short-wave (SWIR) camera: Detection range: 40km / Recognition range (vehicle/vessel): 30km / Identification range: 20km
Drive Range	<ul style="list-style-type: none"> Pan drive angle: 360° continuous rotation, Tilt drive angle: +40°/-40° - Drive speed: 0.001~60°/sec Continuous (azimuth), 0.001~30°/sec (elevation), - Drive precision: 1mrad (0.057°)
Sensor Characteristics and Main Functions	<ul style="list-style-type: none"> Daytime (EO) camera and lens: 1,000mm optical zoom lens & 2MP camera (near-infrared NIR SWIR function equipped) Cooled thermal camera (MWIR): HDC1200mm (1280×720 resolution)/22x optical/16x digital LRF (range finder): 25m ~ 32km or more (NATO tank 2m×2m) Short-wave SWIR camera: 400mm ~ 1,000mm or more optical continuous zoom SWIR dedicated lens equipped - Short Wave Length Infrared (SWIR) wavelength band: 0.95~1.7μm - 780nm ~ 1,500nm Long Pass (near-infrared nano filter mechanism built-in/patented technology applied model) Filter Control - Deep learning-based image tracking function equipped detection target image tracking system
Specifications	<ul style="list-style-type: none"> Drive method: Harmonic precision control method (pan/tilt drive method) Weight: 85kg (entire equipment), sensor components: 25kg or less, 4-stage separation modular configuration
Power Supply	<ul style="list-style-type: none"> AC 220V 1kW or less (AC/DC 24V/12V used)
Environmental Conditions	<ul style="list-style-type: none"> Operating Temperature Range : - 35~ + 60 °C / Storage Temperature Range : - 45 ~ +70°C
Video Codec	<ul style="list-style-type: none"> H-264, MPEG-4 / MJPEG Full HD gigabit Ethernet and middleware integrated socket serial communication
Communication	<ul style="list-style-type: none"> 10/100/1000 gigabit Ethernet / RS422



03 New Research & Development Status

Low-Visibility Multi-Function Long-Range Video Surveillance Equipment (TORUSS-LR3000 with SWIR) (continued)

Low-Visibility Multi-Function Long-Range Video Surveillance Equipment **Self-Performance Verification**

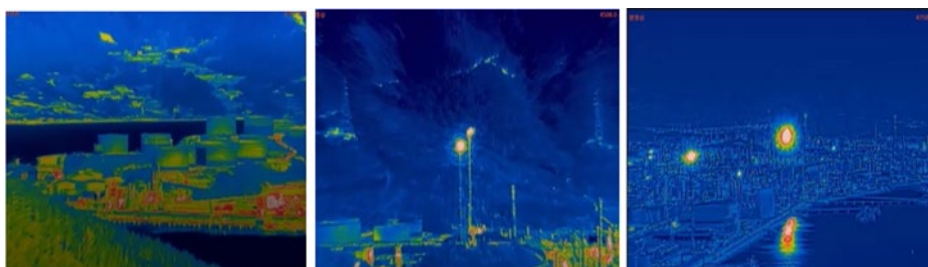
Daytime (EO) Camera (Daytime image acquisition)



Night (IR) Camera (Low-visibility situation, black and white image acquisition)



Night (IR) Camera (Low-visibility situation color image acquisition)

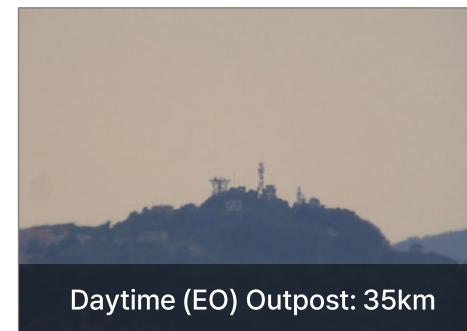


Low-Visibility Situation Multi-Function Video Surveillance Equipment **Performance Verification**

Daytime (EO) Administrative vessel: 35km



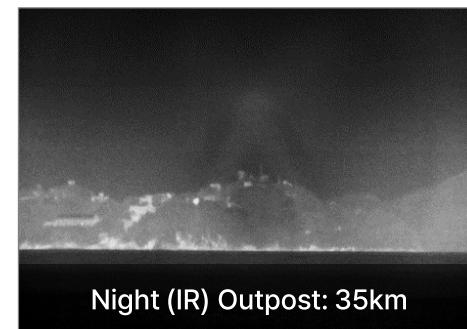
Daytime (EO) Outpost: 35km



Night (IR) Administrative vessel: 35km



Night (IR) Outpost: 35km

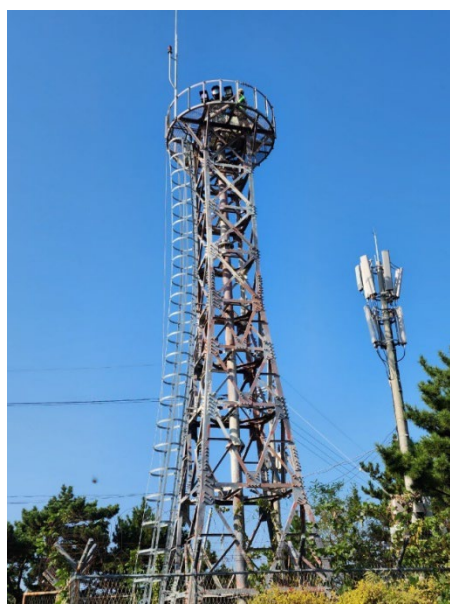
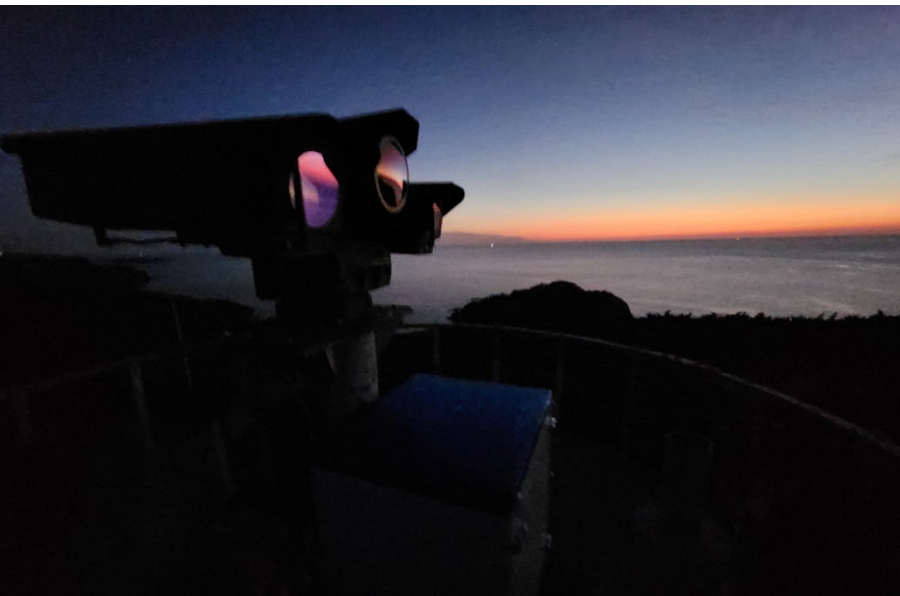


Short-wave (SWIR) Administrative vessel: 35km



Short-wave (SWIR) Outpost: 35km







Specialized company in 'intelligent video surveillance equipment' systems focusing on new technology R&D and core technologies

Global Innovation Partner

Growth into a mid-sized company achieving over 20 billion KRW in sales within 3 years (target: 20% export ratio)



Video Surveillance Equipment Integrated Solutions



Intelligent Integrated System Solutions

Global Market Development

- Export expansion to Asia, the Middle East (Saudi Arabia/Qatar, UAE), and South America regions
- Securing local agent networks

Passion

To achieve the given objectives, an organizational culture that completes assigned missions with confidence and passion, that "we can do it"

Product Portfolio Expansion

- Functional enhancement of military video surveillance equipment products
- Diversification and commercialization of civilian video surveillance equipment products

Professional

A technology-focused culture that leads the industry and market by developing original new products based on creative thinking

Technology Competitiveness Enhancement

- Securing core original technologies for precision control and stabilization
- Advancement of functional unmanned technology and development of core video technologies
- Promotion of cooled thermal imaging camera development

Proactive

A technology development culture that handles tasks proactively and solves problems with the ownership mindset of "I am the CEO."

Core technical personnel development & recruitment

Construction of a new headquarters R&D center

(265 Techno 2-ro, Yuseong-gu, Daejeon Metropolitan City)



5F	305m ²	Management Support Division /Sales Division	CEO Office, Management Support Office, Sales Team, Reception Room, Conference Room
4F	305m ²	R&D Team/AI Research Facilities	Corporate Research Institute/ Research Facilities (R&D)
3F	644m ²	Employee Welfare Facilities (Cafeteria/Break Room)/Meeting Rooms/Conference Rooms	Executive Office, Technology Development Team, System Integration Team, Conference Room
2F	1,301m ²	Production Facilities/Product Manufacturing/Customer Support Equipment	Production Facilities, Manufacturing Facilities (Video surveillance equipment parts and materials development/production)
1F	1,393m ²	System Integration Test Site	Manufacturing Facilities (Video surveillance equipment/production), System Integration Test Site
Total Building Area	3,645m ² (1,100 pyeong)	R&D and Auxiliary Facilities	1,254m ² (32%)
		Production, Manufacturing, Equipment, and Test Facilities	2,694m ² (68%)



**2024-06 InLEX KOREA 2024 Exhibition Participation
(June 17-19, 2024, Daejeon Convention Center DCC)**
- Participation in the defense exhibition for the successful development of the defense sector, core science and technology advancement, and Korean-style future technology preliminary development

Operator Practical Training
(Combat Power Development)



Product Installation and
Integrated Logistics Support (CS)



Core Technology Research &
Development and Product Manufacturing



Partnership with Global Systems Co., Ltd., promising a better tomorrow

2025

2020



Sponsorship donations for disadvantaged children and socially vulnerable groups in Yuseong-gu, Daejeon (Social contribution activities)



SME and Venture Entrepreneurs' Day Neighbor-helping fund donations for the socially vulnerable

2025-01 Designated as "Sharing Excellence Company No. 28" by Daejeon

Community Chest of Korea

2024-12 Daejeon SME and Venture Entrepreneurs' Day, neighbor-helping fund fundraising

2024-12 Yuseong-gu Happiness Nuri Foundation donation

2024-08 Golf Zone Cultural Foundation donation

2023-12 Daejeon Metropolitan City Volunteer Association donation

2022-12 Yuseong-gu Haengbok Nuri Foundation donation

2022-11 Underprivileged neighbor-helping fund fundraising

2022-12 Yuseong-gu Hope Nuri Foundation donation

2022-10 Underprivileged neighbor-helping fund fundraising

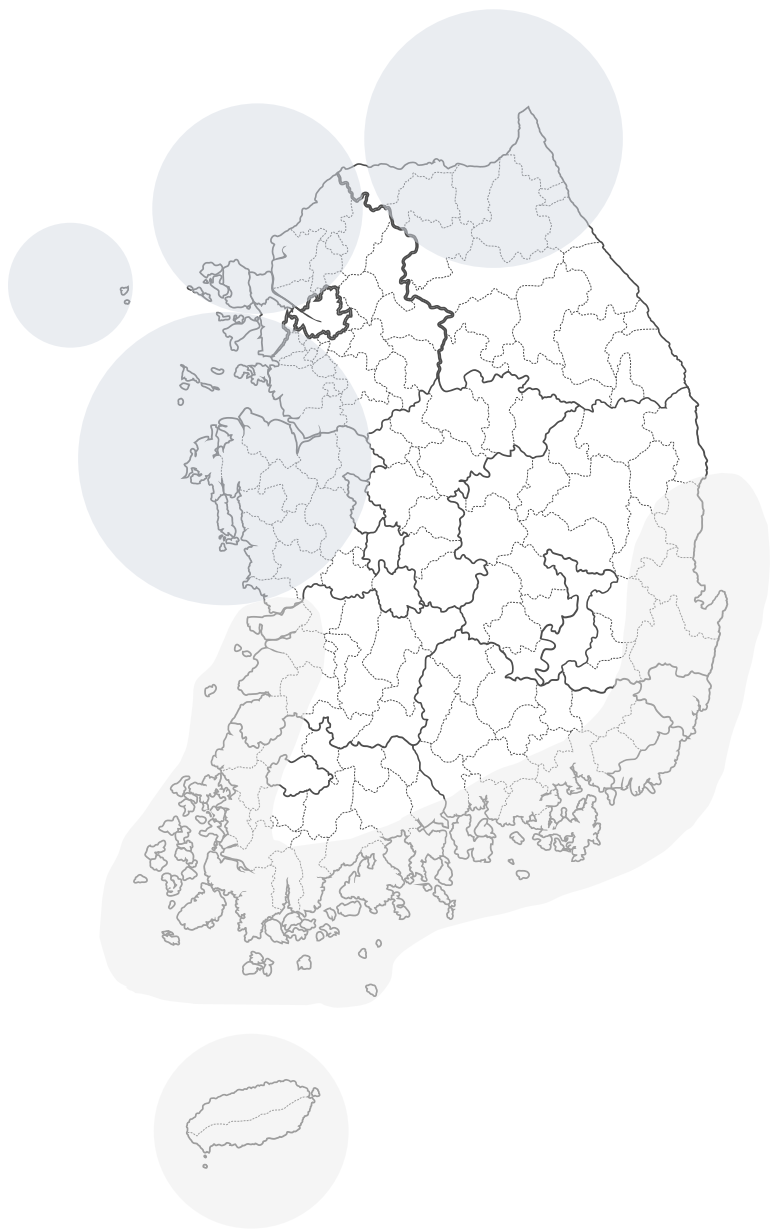
2021-12 Daejeon Metropolitan City Volunteer Association donation

2021-12 Yuseong-gu Hope Nuri Foundation donation

2021-11 Joint underprivileged neighbor-helping fund fundraising

2021-09 Daejeon Metropolitan City Volunteer Association donation

2020-09 Daejeon Metropolitan City Volunteer Association donation



**A video surveillance system specialist
company equipped with 'core technologies' and
'accumulated experience'
Global Systems accompanies you from
beginning to end.**



Address 1F, 10 Yuseong-daero 1205beon-gil, Yuseong-gu, Daejeon Metropolitan City
Tel 042-825-9190
Fax 042-825-9187

