

ENTOSS

ENTERPRISE OF TOTAL SURVEILLANCE SYSTEM



ENTOPER

The Brand of ENTOSS





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CH01. About ENTOSS

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CH01. About ENTOSS

I. Company Overview

The Most Advanced
Information Technology Provider

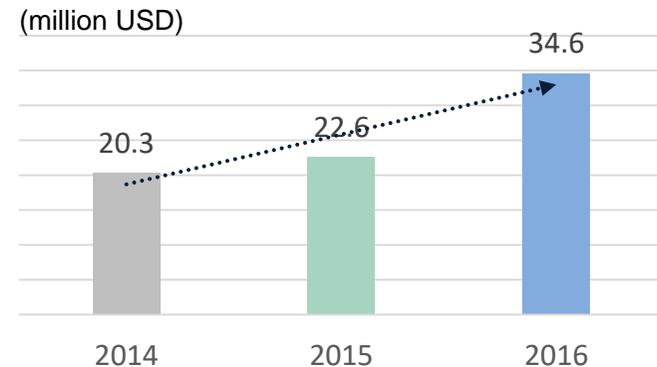


The Best
Customer Success Generator

The Highest
Company Value Creator

- **Firm name** ENT OSS Co., Ltd.
- **Date of foundation** May 2001
- **President** Cho Tae-ya
- **Business area** System Integration, Manufacturing
- **Business Scope** CCTV, System Integration, ITS, Surveillance System/Solution Providing
- **Association** Korea Surveillance Equipment Association (414 companies) Representative Director
- **Address** 7-75, Geurugogae-ro 188beon-gil, Gwangjeok-myeon, Yangju-si, Gyeonggi-do, Korea / Post code: 11415
- **Contact** +82 2 6340 5800

- **Credit grade** BB+ (NICE Credit)
- **Sales** 2016' sales 70% increase compared to 2014'



CH01. About ENTOSS

I . Company Overview



- **Firm name** ENTOSS MALAYSIA SDN. BHD.
- **Date of foundation** March 2018
- **Sole Owner** Cho Tae-ya

- **Business area** Surveillance system, System Integration
- **Business Scope** CCTV, System Integration, ITS, Surveillance System/Solution Providing

- **Registered Address** 2-37, PV 128, 128 JALAN GENTING KLANG, 53300 KUALA LUMPUR W.P., KUALA LUMPUR, MALAYSIA

- **Capital(paid-up)** RM 1,000,000

SSM
SURuhanMAYA & SYARUKAT MALAYSIA
COMPANIES COMMISSION OF MALAYSIA
(Agensi di bawah KEMENTERIAN)

COMPANIES ACT 2016 (SECTION 17)
(ACT 777)

**CERTIFICATE OF INCORPORATION
OF PRIVATE COMPANY**

This is to certify that

**ENT OSS MALAYSIA SDN. BHD.
(1274403-D)**

is, on and from the 30th day of March 2018, incorporated under the Companies Act 2016, and that the company is a company limited by shares and that the company is a private company.

Dated at **KUALA LUMPUR** this 30th day of March 2018.

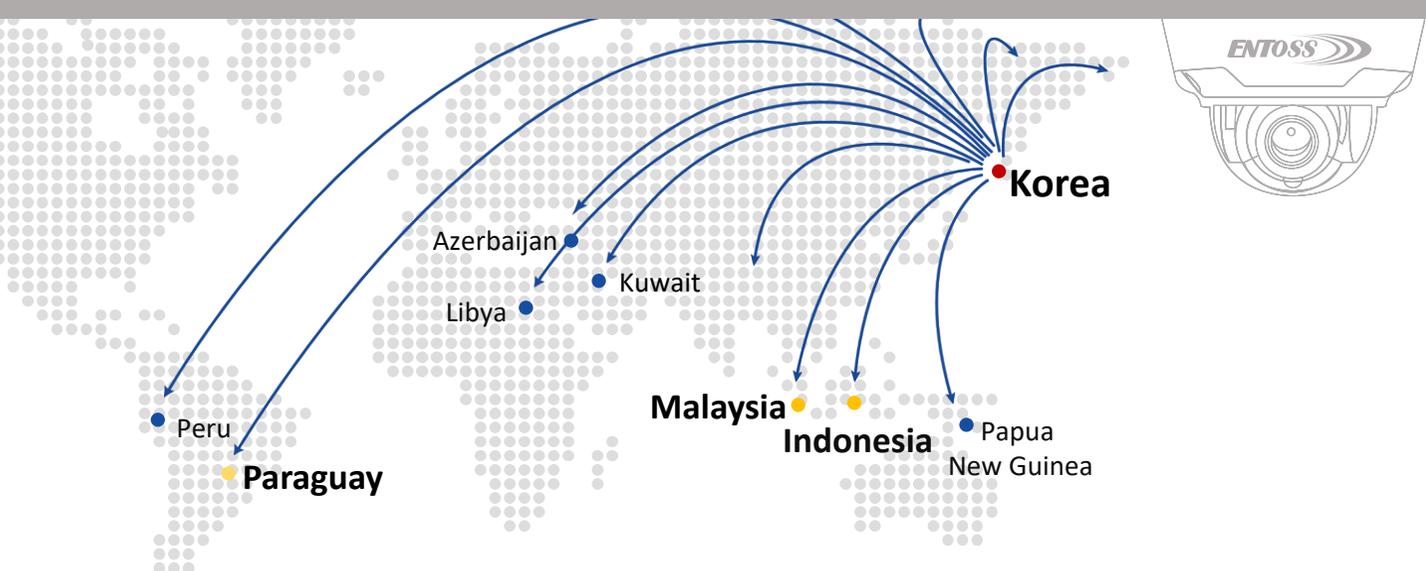
[Signature]
DATO' ZAHRAH AHMAD WAHAB FENNER
REGISTRAR OF COMPANIES
MALAYSIA

MYDATA
Sdn Bhd

User Id: Mvorange Date: Fri Mar 30 14:02:25 2018 Printing Date: 30/03/2018
This certificate is generated from MYDATA SSM service as at 30/03/2018 14:02:25
MENARA SSM@SENTRAL, NO. 7, JALAN STesen SENTRAL, S. KUALA LUMPUR SENTRAL, 50473 KUALA LUMPUR
TEL: 63-2299 4400 FAX: 63-2299 4411

CH01. About ENTOSS

II. Major Reference : Overseas Business



Year	Project	Project Owner	Project Details
2017	CCTV for ATMS	Ministry of Interior, Indonesia	Security CCTV for preventing crime in city & recognition system for vehicle number plate
2016	Patrol vehicle CCTV	Ministry of Interior, Peru	Intelligent CCTV for patrol vehicle, PERU
2015	Video Surveillance	Kuwait Oil Company	Installment to monitor system for Oil-pipe in Kuwait
	CCTV for ITS	KOICA	Performing to develop Advanced Transportation Management System(ATMS) in Asuncion of Paraguay
2014	Video Surveillance	Daewoo E & C Libya	Cycle project combined ZWITINA of LIBYA
	Patrol vehicle CCTV	Ministry of Interior, Peru	Intelligent CCTV for patrol vehicle, PERU
	Intelligent Video Surveillance	Ministry of National Defense, Republic of Korea	Installment of science GOP(General Outpost) of DMZ with North Korea
2013	CCTV for Crime Prevention	Korean National Police on	Installment and integration to CCTV for security
	Intelligent Video Surveillance	Ministry of National Defense, Republic of Korea	Installment & manufacture to set of surveillance camera for middle distance
	Video Surveillance	KOICA	CCTV System for Ulaanbaatar factory of Mongolia
2012	CCTV for Patrol vehicle	Ministry of Interior, Indonesia	CCTV System for Intelligent Patrol Vehicle, Indonesia



2018 ~

- Incorporated ENTOSS MALAYSIA SDN. BHD. in Malaysia

2015
~ 2017

- Quality Certification (Q-Mark)
- \$5-Million Export Tower
- Certify Excellent Product Government Procurement (Public Procurement Service , ROK)
- Excellent Performance Certification (SMBA)

2005
~ 2014

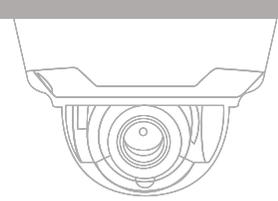
- Certified ISO 9001:2000 / KS A 9001:2001
- Enrolled in the Association of Trading Businesses in Korea
- The laboratory establishment
- Acquired Certificate of INNO-BIZ
- Venture business certification(SMBA)
- Certified ISO 9001:2008 / KS Q 9001:2009
- Received a legal license for production
- Received a legal license for software business

2001
~ 2004

- Established corporate body of Entoss Information Communication
- Cooperative firm proved with Samsung Techwin
- Proved high quality of CCTV by Samsung Techwin
- Construction with CCTV of Samsung Electronics
- Cooperative firm proved with Samsung Electronics
- Cooperative firm proved with Haniwell
- Registration of Information Communication Construction Business
- Enrolled in the Association of Information Communication in Korea

CH01. About ENTOSS

IV. Company Profile : Technology - Management and Direct Production Certifications



- Certification of Information and Communication Works Business



ISO9001

- ISO9001:2008 (ICR)



Contractor

- Certification of International Contractor (International Contractor Association)



Inno-Biz

- Certificate of Inno-Biz (Ministry of SMEs And Startups, ROK)



Quality

- Certificate of Quality Certification: CCTV system (Korea Testing Certification)



- P500 Project Certificate (Korea trade-investment promotion Agency, ROK)



- Closed Circuit Television



- Disk array Software



- Recognizing Number plate



- Electronic display Software

(Korea Federation of Small and Medium Business)

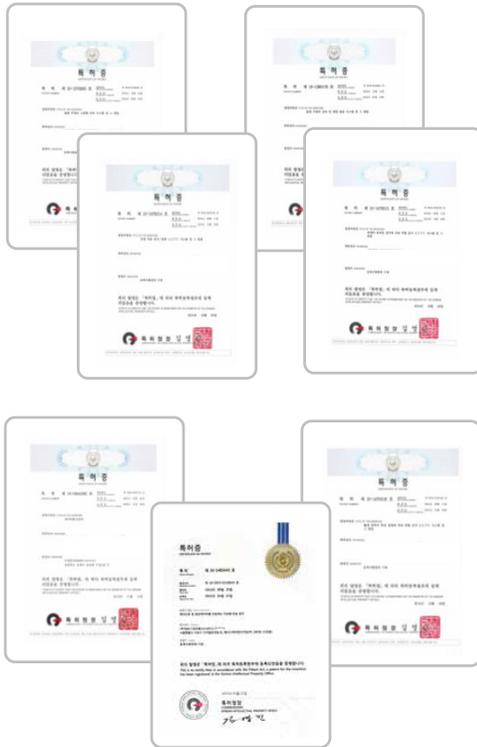


CH01. About ENTOSS

IV. Company Profile : Technology

- Possessions of related intellectual property rights

Letters Patents



- **CLOSED-CIRCUIT TELEVISION SYSTEM OF SENSING RISK ACCORDING TO THE CHARACTERISTIC OF SENSING AREA AND METHOD THEREOF**
(The Patent No. 1014703160000)
- **CLOSED-CIRCUIT TELEVISION SYSTEM OF AUTOMATIC RECOGNIZING/CLASSIFYING OBJECT AND METHOD THEREOF**
(The Patent No.1014703140000)
- **CLOSED-CIRCUIT TELEVISION SYSTEM OF SENSING RISK BY MOVING OF OBJECT AND METHOD THEREOF**
(The Patent No.1014703150000)
- **INTELLIGENT APPARATUS FOR TRNASSMITTING CONTROL SIGNAL AND IMAGE DATA**
(The Patent No.1014834430000)
- **METHOD OF TRACKING AND RECOGNIZING NUMBER PLATE FOR A CRACKDOWN ON ILLEGAL PARKING/STOP**
(The Patent No.1013593320000)
- **A TWO-WAY SYSTEM FOR CRACKDOWN ON ILLEGAL PARKING/STOP AND CRIME PREVENTION AND A TWO-WAY METHOD THEREOF**
(The Patent No.1013901790000)
- **FIXED TYPE OF CRACKDOWN SYSTEM ON ILLEGAL PARKING/STOP AND METHOD THEREOF**
(The Patent No.1013702850000)



CH02. Business Scope

I . City Security System

II. Illegal Parking

III. Intelligent Video Analysis

IV. ATMS

V . Border Security System

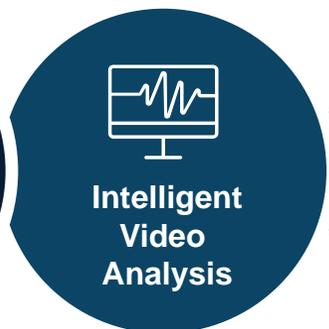




“ENTOSS” Surveillance Specialist



- Public security system for people's safety
- Store management and security system for business
- Integrated CCTV Command & Control System



- Intelligent Video Analysis System
- Object Recognition & Auto Tracking System



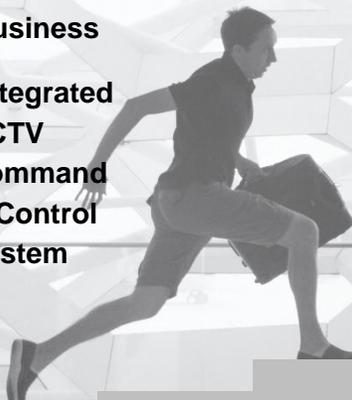
- Illegal Parking Crackdown System
- Number plate Recognition & Tracking System



- ATMS integration system
- BIS/BMS, Traffic signal control, video detection, CCTV, etc.



- Major Facility Vigilance and Border Surveillance System
- Thermal Observation System





CH02. Business Scope

I . Security System : Integrated CCTV Command & Control System

No limit on quantity and type of cameras, This system integrate and manage additional programs-Number Plate Recognition Program, Access Control System, Warning Alarm, and Geographic Information System, etc - with Open Platform.

CCTV video data traffic from video server and IP cameras distributed processing by receiving Unicast and transmitting Multicast

Duplex configuration system for non Stop operation

Providing Quick Search and Backup for managing video and user information

Quick Search and Backup

Efficient video data transmission

System Stability

User-Friendly functions

Priority-based PTZ Control, Voice bidirectional communication, Warning alarm & Sensor control

Interworking with installed CCTV and or expanding CCTV cameras With server-client structure

Easy to interwork and expand CCTV

< Integrated Video Control System >



Interworking with third part system

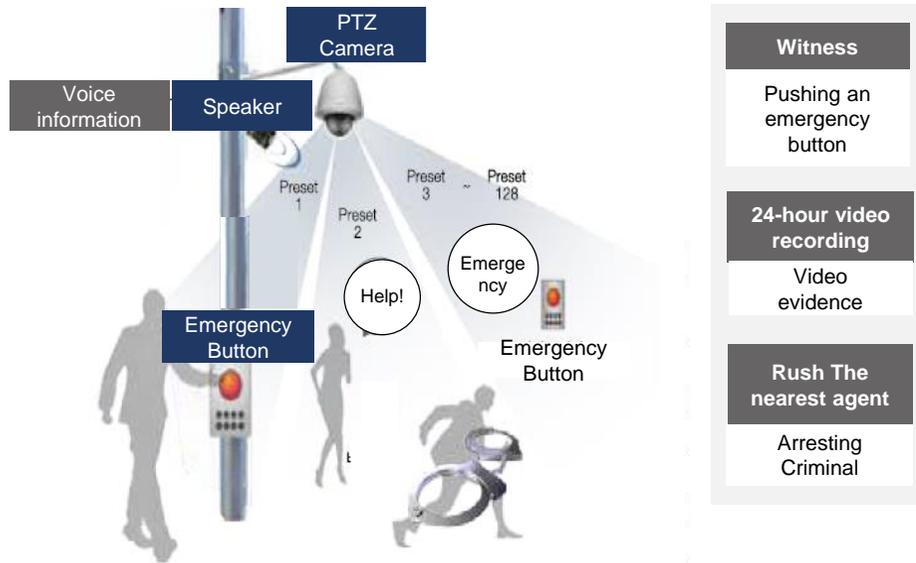
With providing SDK and API, the system interworks with other systems, such as GIS and Number Plate Recognition Program



CH02. Business Scope

I . Security System : Integrated Crime Prevention & Surveillance System

In order to ensure resident's safety from various and intellectual crime, this high-tech integrated system provides Crime Prevention & Surveillance as Solution.



< Integrated Crime Prevention & Surveillance System >



< Integrated Crime Prevention & Surveillance System UI >

Automatic Object Recognition

Surveilling crime-ridden districts, restricted area, vulnerable area selected by administrator

Automatic Video Analysis

Surveillance by classifying human, vehicle, object
Surveillance by analysis of human actions and behavior
Analysis and monitoring Of traffic direction on one-way road

Event and Warning Searching

Ringling warning alarm when an event occurs,
Automatically recording detected events, storage, search

System Interface

Interworking with Geographic Sinformation System (GIS) and Surveillance Video Wall system



CH02. Business Scope

II. Illegal Parking Crackdown System and Crime Prevention CCTV

In order to promote advanced traffic order,
This System crack down illegal parking remotely with ADA Boost Algorithm.



< Illegal Parking Crackdown System UI >

Products

- Illegal Parking Crackdown & Crime Prevention – PTZ Camera
- Multiple Intelligent Service – PTZ Camera / Bullet Camera
- Outdoor Surveillance - Positioning Camera / Pan Tilt Head

Major Function

- Illegal Parking Crackdown
- Crime Prevention
- Intelligent Video Analysis
- Outdoor Surveillance
- Building Security



Related Patents

- **REMOTE MANAGEABLE AUTOMATIC ILLEGAL PARKING MONITORING AND SURVEILLANCE CCTV SYSTEM WITH ADA BOOST ALGORITHM** (the Small and Medium Business Administration, No. 11-346)
- **METHOD OF TRACKING AND RECOGNIZING NUMBER PLATE FOR A CRACKDOWN ON ILLEGAL PARKING/STOP** (The Patent No.1013593320000)
- **FIXED TYPE OF CRACKDOWN SYSTEM ON ILLEGAL PARKING/STOP AND METHOD THEREOF** (The Patent No.1013702850000)
- **A TWO-WAY SYSTEM FOR CRACKDOWN ON ILLEGAL PARKING/STOP AND CRIME PREVENTION AND A TWO-WAY METHOD THEREOF** (The Patent No.1013901790000)



CH02. Business Scope

III. Intelligent Video Analysis

Intelligent Video Analysis System understandably operates the existing security function - simple monitoring, storage, searching. And additionally provides various function such as detecting intrusion, automatic tracking, remote control, sharing video information, warning alarm etc.

■ Video Analysis(Standard)

Shaken Video Correction

No correction | Corrected vision

Automatically correcting shaken video

Intrusion Detection

Tracking object By setting intrusion detection zone

Tampering CCTV Detection

Displaying event message by detecting for tampering CCTV camera

Fixed and/or Selected Area Surveillance

By constructing fixed and PTZ Cameras together, it is able to surveil multi direction or 360 degrees - all direction

Behavior-based Warning Alarm

Illegal act crackdown function

■ Video Analysis(Option)

Wandering Detection

Recognizing and displaying person who is wandering in set area for more than a set time

Person Tracking

Automatically tracking a specific person by setting on interface

Reverse Driving Recognition

Displaying warning alarm by recognizing reverse driving

Embedded Intelligent Analysis

it enables video analysis such as Border Region Setting, Intrusion Detection, Tampering CCTV Camera Detection, Recognizing access-appear-disappearance.

PTZ Auto Tracking

Highly advanced object tracking function Interworking with advanced PTZ Camera. this function enable to detect and trace object

Object Counting

function to easily count the number of objects(human, vehicles, objects) passing through the on-screen setting area

Object Classification

Displaying object information by automatically classifying human, vehicles, objects, etc.

Speed Measurement

Displaying when object passes over the set speed.

Intuitive User Interface

Displaying event messages by setting sections that require Intelligent Video Analysis on the actual display screen

Easy 3D Object Adjustment

Supporting 3D objects, grids, and virtual tape measure to easily and accurately correct the camera's actual position.

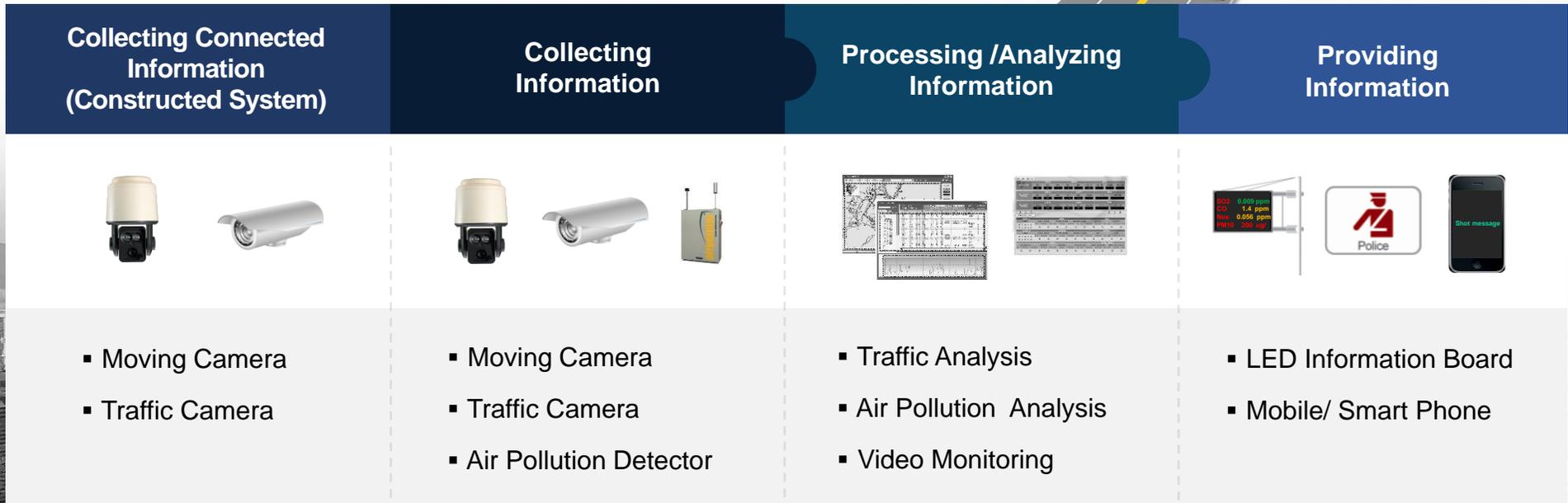


CH02. Business Scope

IV. ATMS

ATMS is the Advanced Traffic Management System. The system provides information to related organization, road user, operator/manager with processed and analyzed information from the local system

- Improving the traffic flow
- Securing movement / Minimizing traffic congestion
- Maximizing the safety and Efficiency of load management
- Providing useful information to users
- Providing a means of aiding users who encounter problems



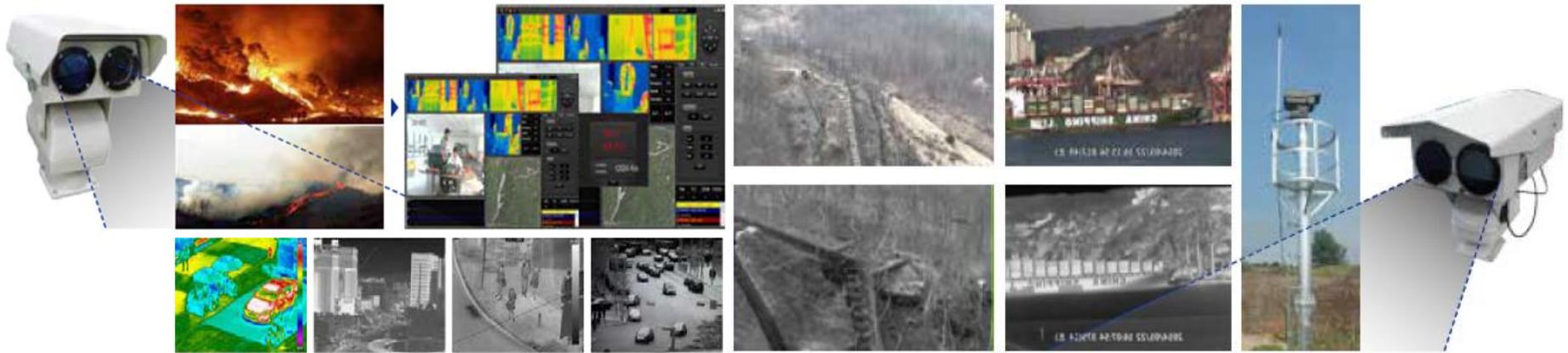


CH02. Business Scope

V. Border Security System: Fire watch / Thermal Observation System

With Thermal Observation Device and CCD camera, Surveilling sudden temperature changes on mountain, city area, skyscraper and cultural properties, Fire watch / Thermal Observation System provides monitoring vision and warning message on GUI.

by seeing heat energy from objects, the system enables to detect object all the time even in complete darkness. So, also the climate does not influence it comparatively. For these reasons, it is installed to scout and to surveil target area as Solution for military purpose



<Fire watch vision and and facility monitoring in Republic of Korea>



<Example of GP / GOP in Republic of Korea>



ENTOSS



ENTOSS + OPERA

ENTOPERA is the first brand name of ENTOSS Co., Ltd.
The big circle symbolizes 'ONE' : the first, the beginning and
The first letter of Opera. And It means the entrepreneurship
Of ENTOSS making everything harmonically as a specialized
Company in SI

ENTOSS Co., Ltd

Head office: 7-75, Geurugogae-ro 188beon-gil,
Gwangjeok-myeon, Yangju-si, Gyeonggi-do, Korea
Post code: 11415

Business address: #604, 53, Gasan digital 2-ro,
Geumcheon-gu, Seoul, Korea
Post code: 08588

Contact: +82 2 6964 7789 **Fax:** +82 70 4060 7790