

SMART AI PLATFORM



SMART AI FACTORY
& MOBILITY SOLUTION



TOTAL AI
SURVEILLANCE SYSTEM



FACE RECOGNITION
ACCESS CONTROL



INTELLIGENT
VIDEO CONTROL

Experience Various Smart AI Platform with FOCUS H&S Solutions.

FOCUS H&S



FOCUS H&S

FOCUS on Humanity & Safety



With advancement of digital technology, FOCUS H&S has been developing video security products with abundant system design capabilities and unrivaled video processing technology since its establishment.

As a result of these efforts, we were able to have edge products such as a camera line-up equipped with AI functions, various storage devices, and environmental sensors and IoT devices, etc.

FOCUS H&S is contributing to various industrial fields by developing cameras and server storage devices with smart AI camera technology and system design technology. We also provide customers with an innovative video integrated control platform with flexible UX and event processing technology.

As a result, we have signed technical agreements with many overseas partners to supply a variety of products, and we have developed and supplied products to one of the largest security companies for our total video management solution.

Focus H&S is always striving for innovative products to create a safer world for everyone.

OUR HISTORY



2012 - 2013

Establishment

- 2013 KC-Series IP Camera
Development of 960/720 DVR
Development of HD-SDI DVR
Development of HH Series NVR
- 2012 FOCUS H&S Co., Ltd. Established



2014 - 2016

Leap

- 2016 Designation of Outstanding Products (Korea Public Procurement Service)
Acquired 4NSYS Co., Ltd.
- 2015 Signed a supply contract with ADT CAPS Korea.
Certified as Venture Business
Launch of Digital Spot
Launch of EX-SDI DVR (PoC)
Launch of TVI/Hybrid DVR
- 2014 Development of World First AHD DVR (1080P)

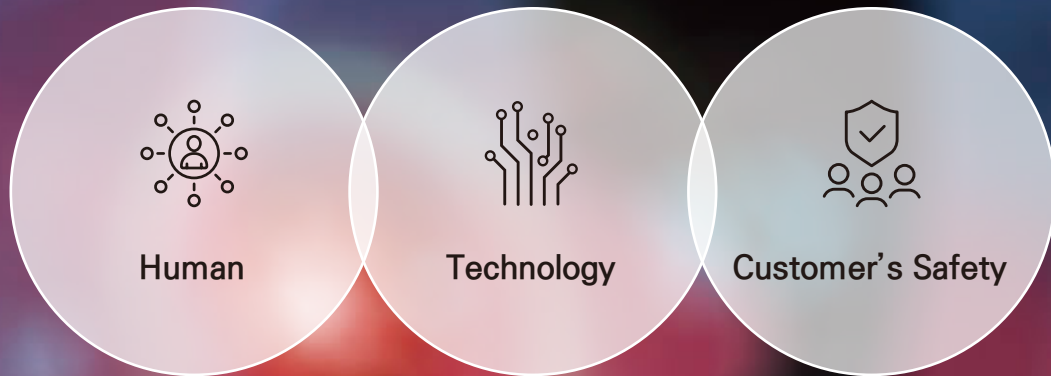


2017 - 2018

Construct Basis for Growth

- 2018 Development of Face Recognition Algorithm
Launch of SKT Point Cam
Supplied NSOK NVR/IP Camera
- 2017 Relocation of Head Office (FOCUS Building)
Developed Number Recognition Algorithm

Core Value



FOCUS H&S has been developing Video-based Safety Solutions that customers need, including video and various sensor data with exceptional researchers with abundant image processing technology and people who have worked on digital images for many years.



2019 - 2020

Challenge & Growth



2021 - 2023

Business Expansion

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> 2020 <ul style="list-style-type: none"> Designated as a Promising Export Company Launch of AI facial Recognition Access Terminal Development of Environment Sensor Launch of Mobile DVR Development of IoT Devices 2019 <ul style="list-style-type: none"> Launch of Intelligent VMS (UVMS) Launch of AI Face Recognition IP Camera | <ul style="list-style-type: none"> 2022 <ul style="list-style-type: none"> Designation as Excellent Innovative Product (Public Procurement Service) Supplied AI cameras to SK Telecom, Korea Development of Mobile Web Control Platform Development of AI Forklift Safety Solution 2021 <ul style="list-style-type: none"> Listed in KOSDAQ Development of AI Unmanned Store Solution Development of Storage Development of AI BOX Development of Medical CCTV system | <ul style="list-style-type: none"> 2023 <ul style="list-style-type: none"> Development of AI Elevator Camera Development of Smart Shelter Platform |
|---|--|--|



EDGE COMPUTING



Most AI technologies operate on servers such as supercomputers, but FOCUS H&S applied all of these technologies to cameras using EDGE COMPUTING technology.

Representative products such as face recognition cameras, number recognition cameras, and EDGE video analysis servers using object recognition and various video analysis technologies have already been developed and are used in various fields, and are used in various cases that EDGE cannot do.

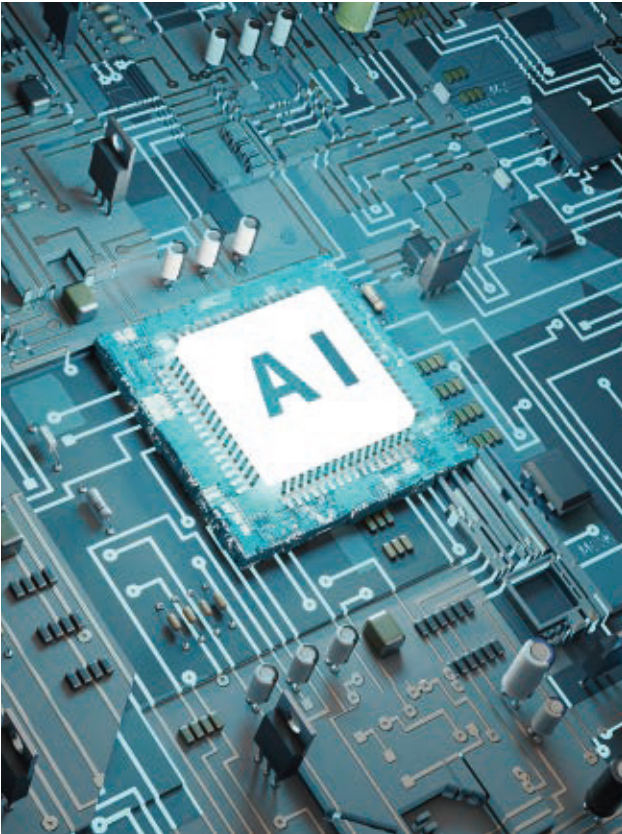
Data is processed through our own video analysis server, UVMS. (Universal Video Management System.)

With many years of experience, we already have data sets for various cases across industries.

The combination of EDGE camera technology through load distribution and the UVMS analysis server capable of more diverse image analysis is the unique advantage of FOCUS H&S, which can quickly respond to various cases in an ever-changing field.

These metadata are collected from the CLOUD platform and used as basic data for big data analysis.

All FOCUS H&S products are equipped with AI object recognition function, and all products are mutually compatible and provide video solutions needed by society at large.



AI Platform Expansion



FOCUS H&S optimizes own AI core technologies to Edge Devices. And by applying these products to various business areas, we have secured meaningful Metadata. As a result, we are expanding our business scope by securing not only Edge AI engines but also data sets.

When these Metadata are accumulated on the CLOUD server, big data analysis is possible through GPU calculation.

FOCUS H&S is equipped with an AI engine in all product lines and enables smart AI-linked analysis through data sharing as well as integration with any 3rd party products through a flexible camera API interface.



CLOUD platform



FOCUS H&S holds original patents for cloud storage of various data.

FOCUS H&S is building a platform that can easily and conveniently apply intelligent services to the customer's environment, from edge devices to CLOUD solutions.

FOCUS H&S can expand various business areas through a full lineup of intelligent video products and a Smart AI platform using edge devices.



AI

Video Surveillance System Provider

Digital Video Recorder

Network Video Recorder

Digital Spot (HD-Decoder)

Environment Sensor



HD TVI DVR

FDR-2100 Series



Analog High Definition DVR (4M Lite)

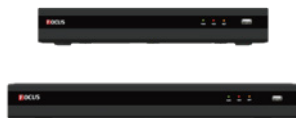
- TVI/AHD/Analog camera support
- Over 400m transmission with 5c-2v cable
- ezP2P™ Cloud Service without any complicated network setting
- 2 x Typical PUSH Functions
 - PUSH Video Call to iPhone/iPad & Android Phone
 - PUSH Network Connection under Event
- Remote Monitoring by Remote S/W(UVMS) & Smart Phone
- Startup Wizard for Easy Configuration

MODEL		FDR-2104 (4 Ch)	FDR-2108 (8 Ch)	FDR-2116 (16 Ch)
Compression Algorithm		Video : H.264/H.265, Audio : ADPCM		
Max. HDD Bay		1 x SATA HDD		
Operating System		Embedded Linux		
Video	Input	4 Ch	8 Ch	16 Ch
	Format	TVI, AHD, SD		
	Loop-out	-		
Video Mode		NTSC/PAL		
Live Display (NTSC/PAL)		120/100 fps	240/200 fps	480/400 fps
Screen Modes for Live Display		1 & 4	1, 4, 6 & 9	1, 4, 6, 9, 10, 13 & 16
Video-Out	HDMI	1024 x 768, 1280 x 1024, 1920 x 1080		
	VGA	1024 x 768, 1280 x 1024, 1920 x 1080		
	Spot (CVBS)	720 x 480		
Recording Speed	960x480/576(960H)	120/100 fps	240/200 fps	480/400 fps
	HD	120/100 fps	240/200 fps	480/400 fps
	FHD	120/100 fps	240/200 fps	240/192 fps
	4M Lite	120/100 fps	240/200 fps	240/192 fps
Recording Resolution	HD	1280 x 720, 1920 x 1080, 1280 x 1440		
	NTSC	352 x 240		
	PAL	352 x 288		
Recording Modes		Continuous, Scheduled, Motion Detection Recording		
		Pre & Post Alarm Recording, Emergency Recording, Quick Backup		
Playback & Search	Speed	x1, x2, x4, x8, x16, x32		
	Screen Mode	1 & 4	1, 4, 6 & 9	1, 4, 6, 9, 10, 13 & 16
	Function	Intelli-Search by Time Bar, Calendar(Date & Time) and Event Search		
Audio Input/Output		1 Ch/1 Ch + HDMI Audio out		
Alarm Input/Output		-		
P/T/Z Control (RS-485)		Virtual Joy-Stick Control on screen by Mouse		
		Pan/Tilt/Zoom/Focus/Iris by Keyboard (Half-duplex)		
LAN		100 Mbps (RJ45)		
		Fixed IP, DHCP & DDNS		
Network Function		1) Dual-Stream (Local Recording & Network Transmission)		
		2) Network Bandwidth Control (25 Kbps ~ 100 Mbps)		
		3) Live Monitoring, Remote Playback and File Backup (Triplex-on-Remote)		
		4) Time Synchronization by NTP Server ("pool.ntp.org")		
		5) Remote & E-Mail Notification, Remote System Reboot, Remote PTZ Control		
		6) P2P Service (Auto Port forwarding)		
Remote Management	Function	UVMS & MMS (MV3000)		
	Web	Live Monitoring, Playback & System Configuration		
Backup	Internal	-		
	External	Local Backup by USB, Network Backup by UVMS		
System Recovery after Power Failure		Auto-Reboot and Journaling File System		
Advanced Functions		1) Firmware Upgrade by USB & UVMS over Network		
		2) Import & Export of Setting Value, AVI File Backup		
		3) HDD SMART Info (Model, Capacity, Bad Sector, Temperature, Used Period)		
		4) Warning Alarm for System Over-Temperature		
		5) Help Message for easy setup & Multi-Language support		
		6) Digital Zoom & VOD mode		
POS		Text-in Based (USB to Serial support, TCP/IP Network)/Display POS Data on Live & Playback		
System Operation		USB Mouse, Keyboard (Option)		
Power		12V DC, 1.5A	12V DC, 2A	12V DC, 3A
Operating Temperature/Humidity		-10 ~ 50°C, 10 ~ 90% RH		
Dimension (W x D x H)		255 x 234 x 42 (mm)		
Certificate		CE & FCC & KCC & WEEE, RoHS		

(*) Specification is subject to change without prior notice.

HD TVI DVR

FDR-3100 Series



Analog High Definition DVR (4K)

- TVI/AHD/Analog camera support
- Over 400m transmission with 5c-2v cable
- ezP2P™ Cloud Service without any complicated network setting
- 2 x Typical PUSH Functions
 - PUSH Video Call to iPhone/iPad & Android Phone
 - PUSH Network Connection under Sensor Event
- POS Function up to 4 sets of POS Devices
- Startup Wizard for Easy Configuration
- Remote Monitoring by Remote S/W(UVMS) & Smart Phone
- Talk-Back Function for 2-way communication with Smart Phone

MODEL		FDR-3104 (4 Ch)	FDR-3108 (8 Ch)	FDR-3116 (16 Ch)
Compression Algorithm		Video : H.264/H.265, Audio : ADPCM		
Max. HDD Bay		1 × SATA HDD	2 × SATA HDD	
Operating System		Embedded Linux		
Video	Input	4 Ch	8 Ch	16 Ch
	Format	TVI, AHD, SD		
Video Mode		NTSC/PAL		
Live Display (NTSC/PAL)		120/100 fps	240/200 fps	480/400 fps
Screen Modes for Live Display		1 & 4	1, 4, 6 & 9	1, 4, 6, 9, 10, 13 & 16
Video-Out	HDMI	1024 × 768, 1280 × 1024, 1920 × 1080, 2560 × 1440, 3840 × 2160 (4K)		
	VGA	800 × 600, 1024 × 768, 1280 × 1024, 1920 × 1080		
	Spot (CVBS)	720 × 480		
Recording Speed	D1~Full HD, 4MP Lite	120/100 fps	240/200 fps	480/400 fps
	3MP	72 fps	144 fps	288 fps
	4MP/4K Lite	60/50 fps	120/100 fps	240/200 fps
	5MP	48 fps	96 fps	192 fps
	4K	7 fps	56 fps	112 fps
Recording Resolution	HD	1280 × 720, 1920 × 1080, 1920 × 1536, 2560 × 1440, 2560 × 1944		
	NTSC	720 × 480, 960 × 480		
	PAL	720 × 576, 960 × 576		
Recording Modes		Continuous, Scheduled, Sensor-Activated & Motion Detection Recording		
		Pre & Post Alarm Recording, Emergency Recording, Quick Backup		
Playback & Search	Speed	x1, x2, x4, x8, x16, x32		
	Screen Mode	1 & 4	1, 4, 6 & 9	1, 4, 6, 9, 10, 13 & 16
	Function	Intelli-Search by Time Bar, Calendar(Date & Time) and Event Search		
Audio Input/Output		4 × 1	8 × 1	8 × 1
Alarm Input/Output		4 × 1	8 × 2	16 × 4
P/T/Z Control (RS-485)		Virtual Joy-Stick Control on screen by Mouse		
		Pan/Tilt/Zoom/Focus/Iris by Keyboard		
LAN		100 Mbps (RJ45)	1000 Mbps (RJ45)	
		Fixed IP, DHCP & DDNS		
Network Function		1) Dual-Stream (Local Recording & Network Transmission)		
		2) Network Bandwidth Control (25 Kbps ~ 100 Mbps)		
		3) Live Monitoring, Remote Playback and File Backup (Triplex-on-Remote)		
		4) Time Synchronization by NTP Server ("pool.ntp.org")		
		5) Remote & E-Mail Notification, Remote System Reboot, Remote PTZ Control		
		6) P2P Service (Auto Port forwarding)		
Remote Management	Function	UVMS & MMS (MV3000)		
	Web	Live Monitoring, Playback & System Configuration		
Backup	Internal	-		
	External	Local Backup by USB, Network Backup by UVMS		
System Recovery after Power Failure		Auto-Reboot and Journaling File System		
Advanced Functions		1) Firmware Upgrade by USB & UVMS over Network		
		2) Import & Export of Setting Value, AVI File Backup		
		3) HDD SMART Info (Model, Capacity, Bad Sector, Temperature, Used Period)		
		4) Warning Alarm for System Over-Temperature		
		5) Help Message for easy setup & Multi-Language support		
		6) Digital Zoom & VOD mode		
POS		Text-in Based (USB to Serial support, TCP/IP Network)/Display POS Data on Live & Playback		
System Operation		USB Mouse, Keyboard (Option)		
Power		12V DC, 2A	12V DC, 4A	
Operating Temperature/Humidity		-10 ~ 50°C, 10 ~ 90% RH		
Dimension (W × D × H)		300 × 249 × 45 (mm)	380 × 268 × 45 (mm)	
Certificate		KC, CE, FCC		

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HD-NVR (PoE)

FNR-3000 Series



HD-NVR with Built-in PoE (Max. 16Ch)

- Plug & Play with Built-in PoE (Max. 16Ch)
- IEEE 802.3 at : Auto Power Distribution to each PoE Port (Max. 30W/PoE Port)
- ONVIF Compatible & Auto IP Camera Detection/Registration
- Intelligent Dual(Main & Sub) Stream Recording/Display
- System Performance Monitoring (Bandwidth & Network Status, etc.)
- P2P Function that doesn't require Port Forwarding
- iSCSI function Support – External HDD through Network
- **Smart Search** – Multiple search by time & minutes' base
- Link Local(Zero Configuration) Supports
- H.264 I-Reference Supports

MODEL		FNR-3004 (9 Ch)	FNR-3008 (9 Ch)	FNR-3016 (16 Ch)
Max. HDD Bay		1 x SATA HDD	2 x SATA HDD	
Operating System		Embedded Linux		
IP Camera	Channel	4 Ch + 5 Ch (Additional)	8 Ch + 1 Ch (Additional)	16 Ch
	Protocol	FOCUS, ONVIF		
	No. of PoE	4 Ch	8 Ch	16 Ch
	PoE Type	100 Mbps, 802.3at		
Display	Speed	270 fps		480 fps
	Screen Mode	1, 4 & 9		1, 4, 9 & 16
Video-In		IP Camera (Up to 4K UHD)		
Video-Out	Monitor	VGA & HDMI		
	Resolution	HDMI : 1024 × 768, 1280 × 1024, 1920 × 1080, 3840 × 2160 (Selectable)		
Recording Speed	CIF ~ 1080P	270 fps		480 fps
	1920P	270 fps		480 fps
	2160P	270 fps		480 fps
Recording Resolution		Main Stream(Up to 4K) & Sub Stream		
Network bandwidth (Max.)		40 Mbps	80 Mbps	160 Mbps
Recording Modes		Continuous, Scheduled, Sensor-Activated & Motion Detection Recording		
		Pre & Post Alarm Recording, Emergency Recording, Quick Backup		
Playback & Search	Speed	x1, x2, x4, x8, x16, x32, x64, x99		
	Screen Mode	1 & 4 : Main Stream, 9 & 16 : Sub Stream		
	Function	Intelli-Search by Time Bar, Calendar(Date & Time) and Event Search		
Audio Input/Output		1 Ch/1 Ch		
Alarm Input/Output		4 Ch/1 Ch	8 Ch/4 Ch	
P/T/Z Control		RS-485, ONVIF		
LAN		1000 Mbps Ethernet (RJ45) – Fixed IP, DHCP & DDNS		
Network Protocol		IPV4, TCP/IP, DHCP, HTTP, RTSP, STMP, FTP, Zero Configuration, NTP, DDNS		
Network Function		1) Dual-Stream (Local Recording & Network Transmission)		
		2) Dual-Recording (Live Display/Playback)		
		3) Live Monitoring, Remote Playback and File Backup (Triplex-on-Remote)		
		4) Time Synchronization by NTP Server ("pool.ntp.org")		
		5) Remote & E-Mail Notification, Remote System Reboot by IE, Remote PTZ Control		
		6) P2P Service (No Port forwarding required)		
Remote Management	Function	UVMS & MMS (MV3000)		
	Web	Live Monitoring, Playback & System Configuration		
Backup Device		Local Backup by USB ODD, Network Backup by CMS, File Upload to FTP Server		
System Recovery after Power Failure		Auto-Reboot and Journaling File System		
Advanced Functions		1) Firmware Upgrade by USB & UVMS over Network		
		2) Import & Export of Setting Value, AVI File Backup		
		3) Quick Setup to designate Recording Period		
		4) HDD SMART Info (Model, Capacity, Bad Sector, Temperature		
		5) Warning Alarm for System Over-Temperature		
		6) Help Message for easy setup & Multi-Language support		
		7) Digital Zoom for both Live & VOD mode		
		8) Smart Search		
POS		Text-in Based (USB to Serial support, TCP/IP Network)		
System Operation		USB Mouse, Keyboard (Option)		
Power		48V DC, 1.25A	48V DC, 2.5A	54V DC, 3.33A
Operating Temperature/Humidity		-0 ~ 45°C, 10 ~ 90% RH		
Dimension (W × D × H)		300 × 249 × 45 (mm)	380 × 268 × 45 (mm)	
Certificate		CE & FCC & KCC & WEEE, RoHS		

(*) Specification is subject to change without prior notice.

36 & 64 Ch HD-NVR**4K Non-PoE NVR****FNR-5000 Series**

- 36/64Ch Real Time Display and Real time Recording
- ONVIF Compatible & Auto IP Camera Detection/Registration
- Intelligent Dual(Main & Sub) Stream Recording/Display
- System Performance Monitoring (Bandwidth & Network Status, etc.)
- P2P Function that doesn't require Port Forwarding
- iSCSI function Support – External HDD through Network
- Smart Search – Multiple search by time & minutes' base
- Zero Configuration Supported

MODEL		FNR-5036 (36 Ch)	FNR-5064 (64 Ch)
HDD Bay/Min. installation		8 x SATA HDD/2 x SATA HDD	8 x SATA HDD/4 x SATA HDD
e-SATA		2EA	
Operating System		Embedded Linux	
IP Camera	Input	36 Ch	64 Ch
	Format	FOCUS, ONVIF	
	Registration	Auto, Drag/Drop, Manual	
Display	Speed	1080 fps	1550 fps
	Screen Mode	1, 4, 9, 16, 25, 36	1, 4, 9, 16, 25, 36, 49, 64
Video-In		IP Camera (Up to 4K UHD)	
Video-Out	Monitor	Composite & VGA & HDMI (2EA)	
	Resolution	HDMI : 1280 × 1024, 1920 × 1080, 2560 × 1440, 2560 × 1600, 3840 × 2160 (Selectable)	
Recording Speed (CIF-4K)		1080 fps	1920 fps
Recording Resolution		Main Stream(Up to 4K) & Sub Stream	
Recording Modes		Continuous, Schedule, Sensor, Motion	
		Pre & Post Alarm Recording, Emergency Recording, Quick Backup	
Playback & Search	Speed	x1, x2, x4, x8, x16, x32, x64, x99	
	Ch & Resolution	1 & 4 : Main Stream / 9, 16, 25 & 36 : Sub Stream	
	Function	Search by Time Bar, Calendar(Date & Time) and Event Search, Smart Search, Advanced Smart Search	
Audio In/Out		1 Ch/1 Ch	
Sensor In / Relay Out		8 Ch/4 Ch	
P/T/Z Control		RS-485, ONVIF	
Network	Ethernet	2EA (LAN/WAN) Gigabit (RJ45) – Fixed IP, DHCP & DDNS	
	Protocol	IPv4, TCP/IP, DHCP, HTTP, RTSP, STMP, FTP, Zero Configuration, NTP, DDNS	
	Bandwidth	200 Mbps	
Network Function		1) Dual-Stream (Local Recording & Network Transmission)	
		2) Dual-Recording (Live Display/Playback)	
		3) Live Monitoring, Remote Playback and File Backup (Triplex-on-Remote)	
		4) Time Synchronization by NTP Server ("pool.ntp.org")	
		5) Remote & E-Mail Notification, Remote System Reboot by IE, Remote PTZ Control	
		6) P2P Service (No Port forwarding required)	
Remote Management	Software	UVMS & MV3000 (Mobile App)	
	Web	Live Monitoring, Playback & System Configuration	
Backup Device		Local Backup by USB ODD, Network Backup by UVMS, File Upload to FTP Server	
Advanced Functions		1) Firmware Upgrade by USB & Smart Web Viwer over Network	
		2) Import & Export of Setting Value, Water-Mark, AVI File Backup	
		3) Easy Setup by Startup Wizard	
		4) HDD SMART Info (Model, Capacity, Bad Sector, Temperature, Used Period)	
		5) Tool for System Performance Monitoring at a glance	
		6) Help Message for easy setup & Multi-Language support	
		7) Digital Zoom for both Live & VOD mode	
		8) Smart Search	
Power		100 ~ 240V AC, 50/60Hz, 30 W (No HDD)	
Operating Temperature & Humidity		5 ~ 40 °C, 20 ~ 90% RH	
Dimension (W × D × H)		445 × 436 × 90 (mm)	
Certificate		CE & FCC & KCC & WEEE, RoHS	

(*) Specification is subject to change without prior notice.

Storage Device

FIR-10000 Series



4K 128CH/256CH Network Storage Device

- All-in-one Storage 128CH/256CH Storage Server
- User Friendly GUI S/W
- Dedicated UVMS linkage and Remote Monitoring via Smart Phone
- Dual Stream (Recording/Network)
- 4K IP Camera(3840 × 2160) Supported
- Onvif Protocol Supported
- RAID/Hot swap Feature Supported
- H.264/H.265 Supported
- Linkage with AI Cameras
: Face Recognition/Thermal/People Counting/Object Recognition, etc.

MODEL	FIR-10128	FIR-10256	Remark
Input	128 Ch	256 Ch	
Live Display	Display Simultaneous channel	64 Ch	128 Ch
	Screen Mode	1, 4, 9, 16, 32, 64	1, 4, 9, 16, 32, 64, 128
Video Resolution		D1, 720p, 1080p, 4M, 4K	
Recording	Speed	3840 fps	7680 fps
	Screen Mode	Continuous, Scheduled, Sensor-Activated & Motion Detection Recording, Post Alarm Recording, Emergency Recording	
Playback & Search	Speed	x1, x2, x4, x8, x16	
	Screen Mode	1920 fps	3840 fps
	Function	Intelli-Search by Time Bar, Calendar(Date & Time), Event/System Search	
Interface	Ethernet × 1	Ethernet × 2	
CPU	Core 9 i5	Core 10 i7	
OS	Ubuntu Linux Desktop 64bit		
Memory	DDR4 16GB	DDR4 32GB	
Graphic Card	Built-in Graphic Card		External Graphic Card : Optional
SSD	256 GB (OS & S/W)		
RAID	RAID 1,5,6 Supported		
HDD Bay	3.5 Inch (Hot Swap)		
Video Output	HDMI/DP/DVI		
Power	550W single	800W Dual (Redundant power)	12V DC, 3A
Operating Temperature/Humidity	5 ~ 40°C, 0 ~ 90% RH		
Dimension (W × D × H)	438 × 560 × 88 (mm)	430 × 560 × 133 (mm)	
Certificate	CE & FCC & KCC & WEEE, RoHS		

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Key Features

FOCUS H&S NVR series are compatible with various AI cameras and provides multiple AI features. Experience Smart AI Solutions.

Applications



Face Recognition



Object Recognition



Multi-Functional Recognition

Mobile Witness

Use your mobile phone as Wireless IP cameras in emergency. With our special "Mobile Witness" App on your phone, you can transmit phone camera video and save the recording data at remote NVR via Wifi or LTE network. You can assign your mobile phone camera at any vacant channel of your NVR. It save the address information with video by using GPS of mobile phone.

Digital Spot

HD-Decoder

FS-1016N

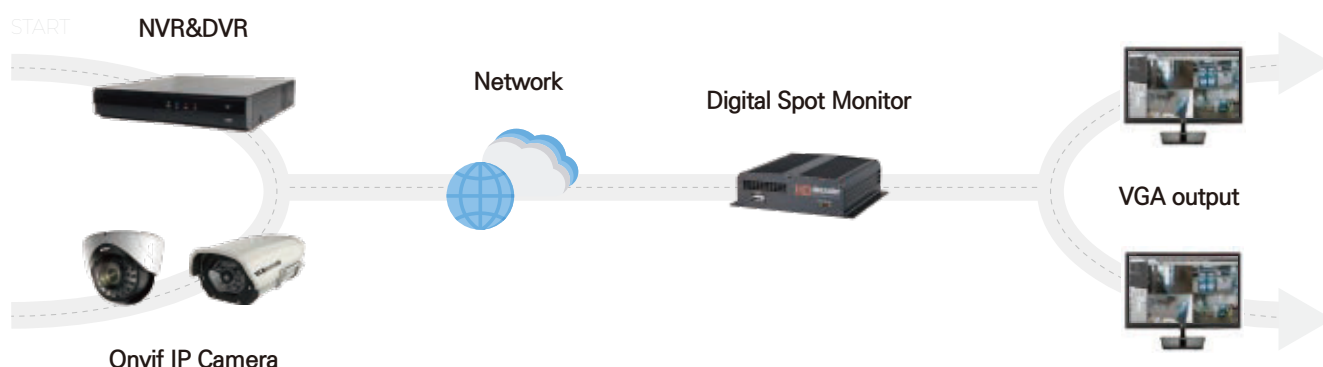


- Small Size Design
- Supports up to 16 channels, 16 channels monitoring in one screen
- Supports 8 Mega pixels (3840 × 2160) resolution
- ONVIF compatible & automatic connection with FOCUS H&S DVR/NVR
- Easy search and registration
- System status monitoring
- Supports system, camera bandwidth, network status monitoring
- H.264 & H.265 Support
- HDMI, VGA video output

MODEL		FS-1016N
Operating System		Embedded Linux
IP Camera	Input	16 Ch
	Protocol	FOCUS, ONVIF
Display	Speed	480 fps
	Screen Mode	1, 4, 9, 16
Video-In		IP Camera (Max. 8 Megapixel, supports 3840 × 2160 resolution)
		FOCUS H&S NVR, DVR
Video-Out	Monitor	HDMI (1), VGA (1)
	Resolution	800 × 600, 1024 × 768, 1280 × 1024, 1920 × 1080, 3840 × 2160 (Selectable)
LAN		Gigabit Ethernet (RJ45)
		TCP/IP(STATIC, DHCP), UDP, RTP, RTSP, RTMP, ONVIF, UPNP, HTTP, SSL
Network Function		1) Live Monitoring
		2) Time Synchronization by NTP Server ("pool.ntp.org")
Remote Management		Web (IE) : System Setting
Ext. Backup Device		1EA e-SATA
System Recovery after Power Failure		Auto-Reboot and Journaling File System
Advanced Functions		1) Firmware upgrade by USB & CMS over Network
		2) Import & Export of Setting Value
		3) Warning Alarm for System Over Temperature
		4) Digital Zoom
System Operation		USB Mouse
Power		12V DC
Operating Temperature/Humidity		5 ~ 40 °C, 20 ~ 90% RH
Dimension (W × D × H)		139 × 123 × 32 (mm)
Certificate		KC, CE, FCC

(*) Specification is subject to change without prior notice.

Composition



Onvif IP Camera compatible & FOCUS DVR/NVR Automatic connection

Digital Spot Monitor is compatible with Onvif IP Camera and support automatic camera searching, also Digital Spot Monitor is automatically connected with FOCUS H&S DVR/NVR. Thus, user doesn't need to inconvenient connection and assignment setting. (Maximum 8 Mega Pixel IP Camera support.)

Environment Sensor

Indoor IP Environment Sensor

FG-200A



- Sensor data transmission through IP network.
- Sensors : Temp., Humidity, TVOC, CO2, Fine/Ultrafine Dust
- Condition Status Notification by 5 levels with LED color.
- Alarm notification by Buzzer
- Data Management with Image through FOCUS NVR

Models per Sensor Configuration		
FG-200A		Temp, Humidity, TVOC, CO2, Fine/Ultrafine Dust
FG-200B		Temp, Humidity, TVOC
FG-200C		Temp, Humidity, TVOC, Fine/Ultrafine Dust
FG-200D		Temp, Humidity
MODEL	FG-200A	
Temperature Sensor	-40 ~125°C	
Humidity Sensor	0 ~ 100% RH	
TVOC Sensor	0 ~ 60000 ppb	
CO2 Sensor	0 ~ 40000 ppm	
Fine Dust/Ultrafine Dust Sensor	0.3 ~ 1000 $\mu\text{g}/\text{m}^3$	
Network	Protocol	TCP/IP, HTTP, UDP, DHCP, NTP, ARP, ICMP
	Network	RJ-45 (10/100 Base-T)
Software	UVMS, MV3000, IP Installer	
LED Status Notification	Very Good : Blue	
	Good : Green	
	Normal : Yellow	
	Bad : Purple	
	Very Bad : Red	
Power	12V DC, PoE – 802.3af : PS5712 Splitter / 3W	
Connection Cable	DC jack/Ethernet/Reset	
Operating Temperature/Humidity	-10 ~ 50 °C, Less than 90% RH	
Dimension (W × D × H)	128 x 128 x 46 (mm)	

(*) Specification is subject to change without prior notice.

Sensor Data can be setup & monitored at the Web Browser.

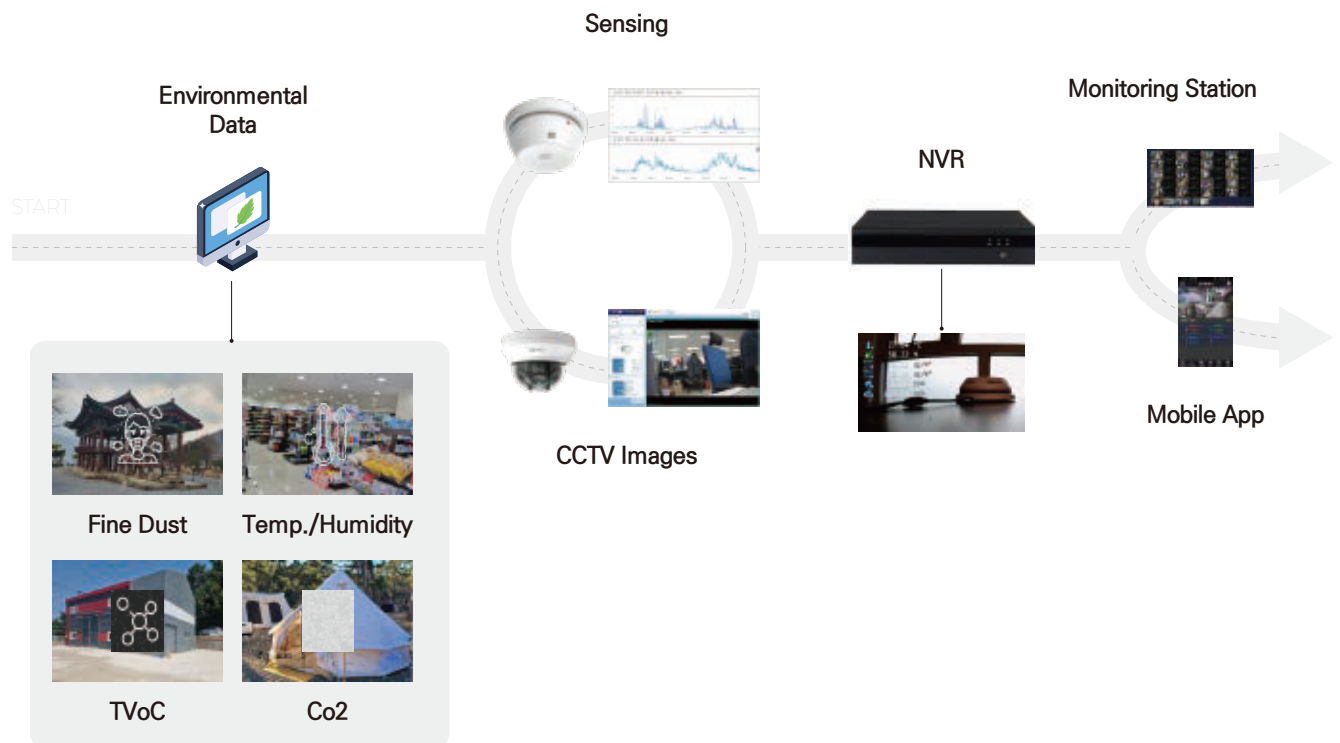


Setup

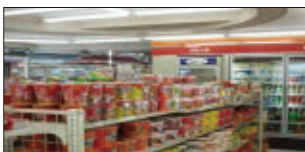


Monitoring

Establishment of an efficient management system through integrated system configuration of Environment Sensor + CCTV Cameras



Applications



Store



Kindergarten



Farm/Greenhouse



Indoor Sports Center

VMS Software

Universal Video Management Software

UVMS (VMS Software)

UVMS(Universal Video Management Software) is a powerful centralized management solution that offers users full flexibility to control the entire system(DVR, NVR & IP Camera) over the network.

Users can set automatic backup schedule for effective handling of massive volume of video data, and also get full monitoring on system status.

It is optimized software to the monitoring site where many sites are linked and provides effective monitoring by event pop-up, smart search, real time event monitoring and so on.



Video Data

AI Analysis Data

Big Data

Structured AI Data analysis

+

Visualized report by DB Data

Key Features

Create a safe and efficient work environment.



LIVE
Play-back
Back-up



Event Pop-up
Total Report
Device Monitoring



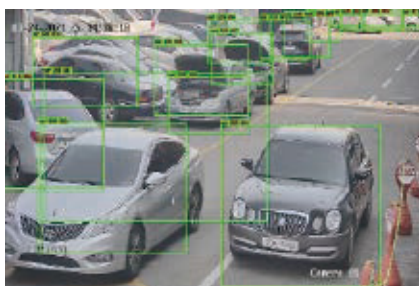
E-map
Witness App
Emergency Alarm

Seamless AI Smart Search and Analysis

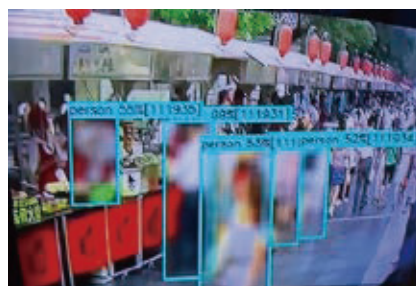
Users can search the desired objects, colors, other various options and check the results as Card Type.



Examples



Car Recognition



People Recognition

FOCUS H&S

Face Recognition Access Control Solution

Convenient and Safe
Optimized Access control total solution
based on AI facial recognition

Efficient Access Control & Access Management System



Permission Setting
by Group

+



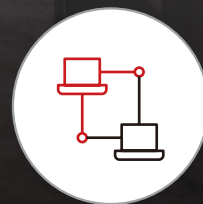
Access Record
Information
Usage Statistics

+



Statistics per
Area, Time

+



Linkage with various
systems including
Time & Attendance,
CCTV, etc.

Face Recognition

The Highest Level of
Biometric Recognition system
Contactless Access Control

Time & Attendance Management

Commute Management
Support

Visitor Management

Visitor registration,
Application, Approval,
Detailed Access Security
Support

User-friendly UI

Provides Convenient System
by Providing a User-friendly
UI

Face Recognition Access Control Solution

Solution that can control/manage user management and access by linking with facial recognition terminals.

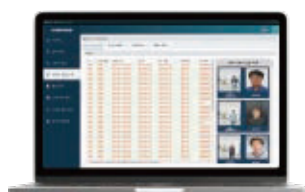
AI CONTROL CENTER



Access Control System Dashboard



User Management

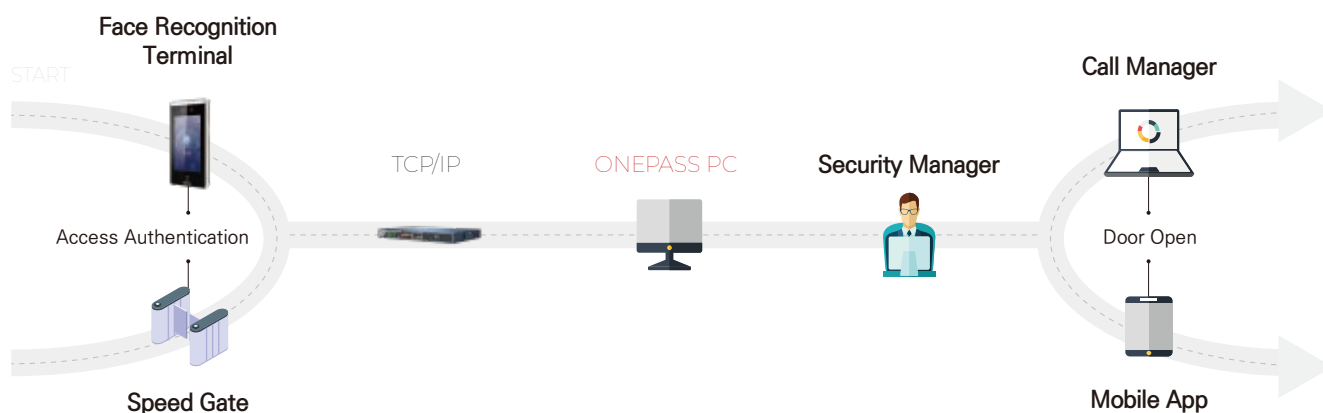


Real-time Event Management



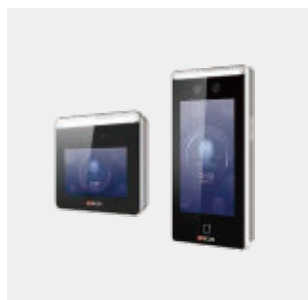
User Movement Management

System Configuration



Products

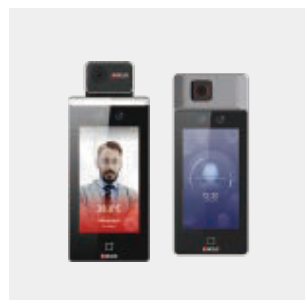
Line Up



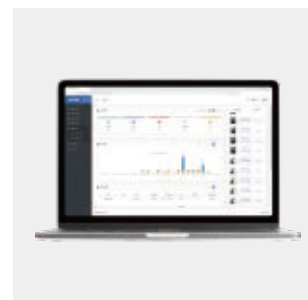
4 Inch Face Recognition Terminal



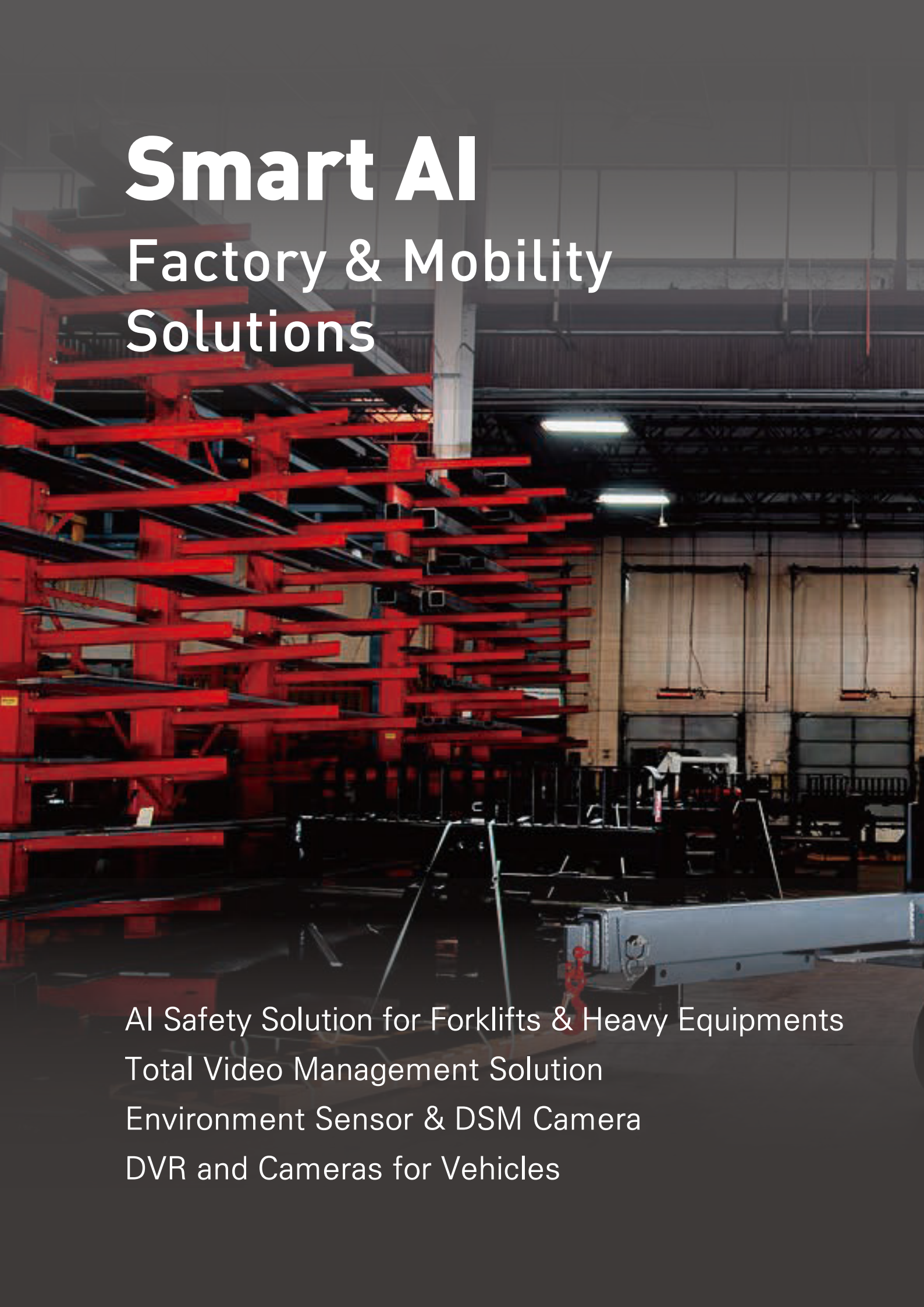
7 Inch Face Recognition Terminal



7 Inch Thermal Face Recognition Terminal



ONEPASS Web based S/W & Mobile App



Smart AI

Factory & Mobility Solutions

AI Safety Solution for Forklifts & Heavy Equipments
Total Video Management Solution
Environment Sensor & DSM Camera
DVR and Cameras for Vehicles



Forklift AI Safety Solution

The object recognition function identifies people while moving and immediately sounds an alarm when they enter the danger radius, preventing collisions in advance.

Key Features

Create a safe and efficient work environment.

AI Object Recognition

Detect only people within the risk range crash prevention

High-definition Camera & Monitor

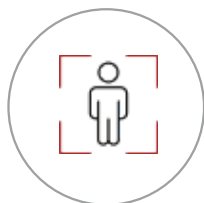
Monitoring and blind spot prevention Supports FHD up to 4ch

All-In-One Monitor

Simplification of installation work 7 Inch/9 Inch/10.1 Inch

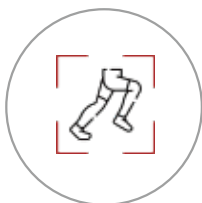
Black Box Function

Save as Video on stable SSD (FM-6004 Model Only)



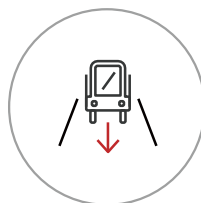
Detect only
Human & Ring Alarm
(Prevent Unnecessary Noise)

+



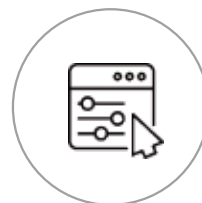
Detect Parts of the
body as Human

+



Alarm Notification only when
moving with forward/
reverse signal Interlocking

+



Detection Range can be
set depending on Camera
Installation Angle/Site

Products

Line Up



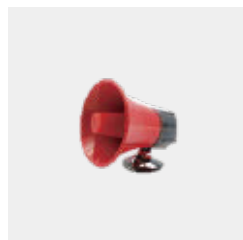
Outdoor Camera



FM-604L



FM-6004



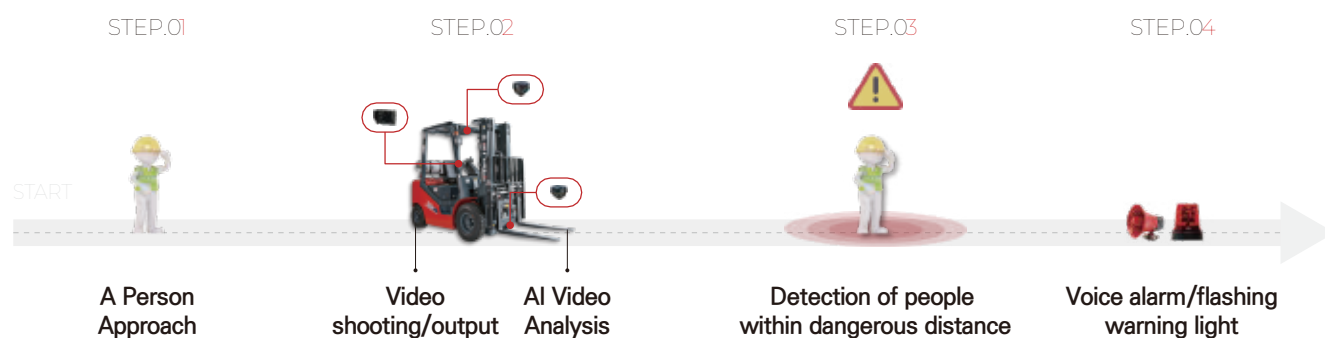
Speaker



Line Beam (Optional)

System Configuration

When a person is detected within the danger range, a siren or voice alarm notifies drivers and workers of the danger, thereby preventing safety accidents in advance.



Specification

Product lineup varies depending on monitor size and specifications.

MODEL	FM-604L7	FM-604L7W	FM-604L9	FM-6004	Others
Features	7 Inch	7 Inch (IP68)	9 Inch	10.1 Inch (Storage)	
Max. Camera Channels	4				
Display Storage	FHD, 1080P				30 fps
Video Storage	Not Supported			Supported, M.2 SSD	Max. 512 GB
Internal Speaker	Supported	Not Supported	Supported		
External Speaker	Supported				
Power	10 ~ 48 V DC				
No. of Triggers	4				Forward/Backward Linkage

Camera (Outdoor)		Speaker (External Voice Alarm)	
Resolution	2MP	Max. Output	20 W
Video Output	AHD, TVI	Sound Pressure	110 dB
Power	12V DC	IP	IP68
IP	IP68	(*) Specification is subject to change without prior notice.	

Installation Example

Install FM-6004 model 2ch on forklift equipment
(Components : 1 all-in-one monitor, 2 cameras, 1 speaker)



Integrated Video Control Solution

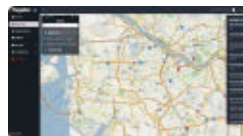
The integrated video control solution is a service that systematically manages various information about operating vehicles, including real-time vehicle operation status, location information, and real-time video monitoring.

Key Features

It is a solution that systematically manages various information such as real-time vehicle operation status, location information, and real-time video through a mobile app or dedicated web platform.

Control Platform

Web Based Total Management Solution (Magellan)



Real-time
Video Monitoring

Linkage with
Environment Sensor

Linkage with
GPS MAP

Vehicle major
event management

Mobile APP

Products

Line Up



Indoor Camera



Outdoor Camera



FM-4004



FM-4008



Environment Sensor

Specification

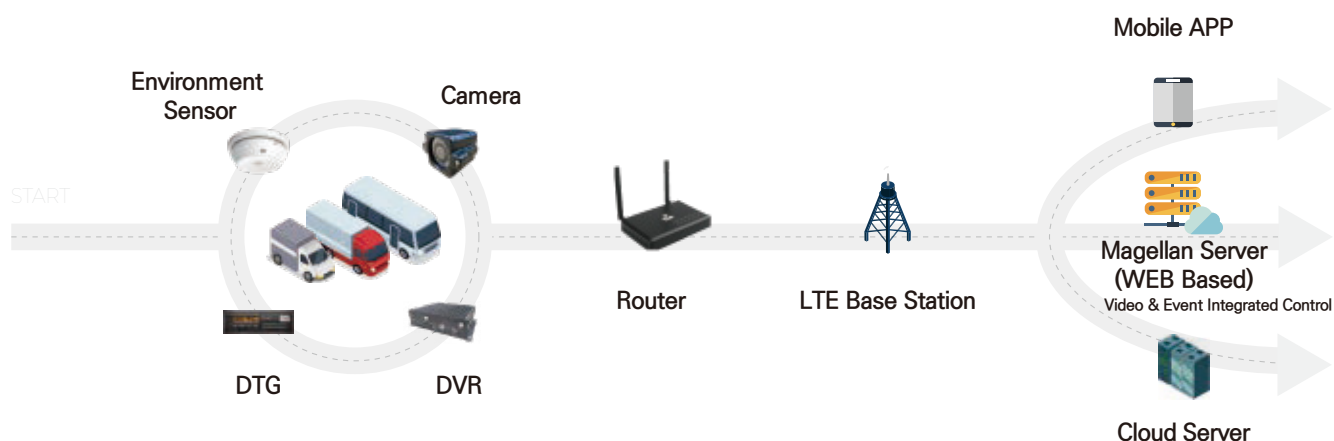
MODEL	FM-4002	FM-4004	FM-4008
No. Of Channels	2 Ch	4 Ch	8 Ch
Display	HDMI : FHD (1920 × 1080) / CVBS : 800 × 600		
Type of Storage	M.2 SSD		2.5" HDD or SSD
Storage Capacity	Max. 512 GB		Max. 2TB
Network	LTE, WIFI		
No. of Triggers	2	4	8

Camera (Outdoor)		Environment Sensor	
Resolution	2MP	Temperature Sensor	-40 ~ +125°C
Video Output	AHD, TVI	Humidity Sensor	0 ~ 100% RH
Power	12V DC	TVOC Sensor	0 ~ 60000 ppb
IP	IP68	Carbon Dioxide Sensor (Optional)	0 ~ 40000 ppm
		Fine/Ultrafine Dust Sensor (Optional)	0.3 ~ 1000 µg/m³

(*) Specification is subject to change without prior notice.

Configuration

Users can configure a network by connecting an LTE router.



Applications

Various types of vehicles, including cargo transport vehicles, passenger vehicles, and special vehicles.



Cargo Vehicle

Route Management
Cold-chain, Fire Detection



Commuter Bus

Driver Management Monitoring
Passenger Management, Fire Detection



Camping Car

Preventing Fire Accidents
Preventing Suffocation Accidents

Driver Behavior Analysis Camera

The Driver Behavior Analysis camera is a solution that prevents accidents by automatically detecting dangerous driving conditions such as drowsy driving or yawning by AI and outputting a real-time warning voice.

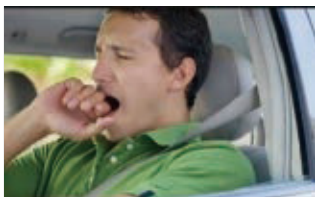
FMAI-1000

Built-in Camera for AI Analysis
Built-in Speaker for Alarm
Built-in GPS
Equipped with AI Algorithm for Behavior Analysis
Focus Platform Integration



Key Features

Automatically detects over 6 hazardous driving conditions
Fatigued driving(Yawning/Closing eyes), phone calls, smoking detection, distraction detection, etc.
Real-time warning voice output to driver (Built-in speaker)



Fatigue Driving Detection
(Yawn/Close Eyes)



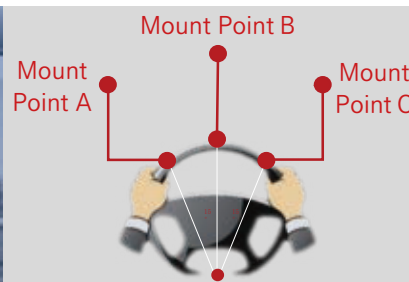
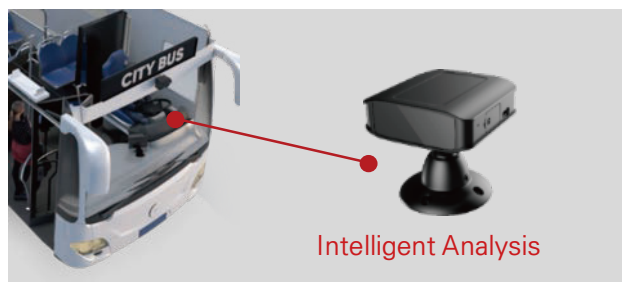
Phone Call Detection



Smoking Detection
Detection of not Wearing
Seat Belt



Distraction Detection
Driver Abnormality Detection



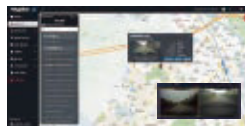
Magellan Vehicle Management Solution (Web Based)

Magellan software provides total video management for vehicle management including map monitoring, real-time route monitoring, driver's behavior analysis, etc.

Key Features



1. Main Dashboard



2. Map Monitoring



3. Route Monitoring



4. Environment Sensor Monitoring

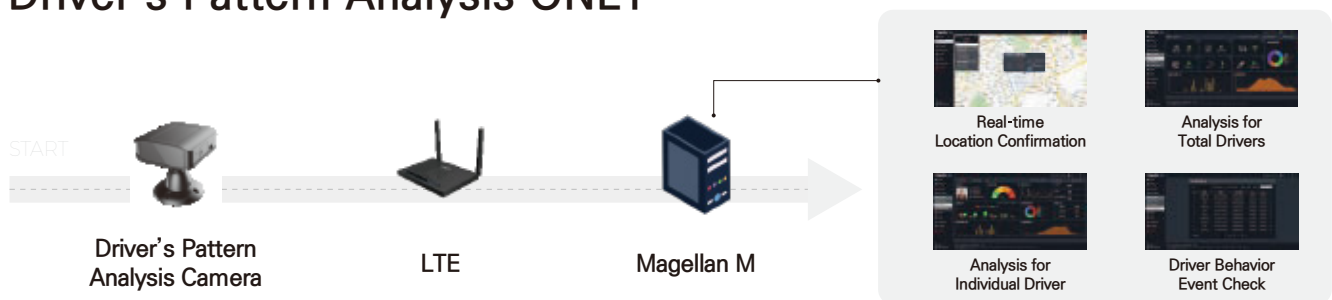


5. Analysis for Total Drivers

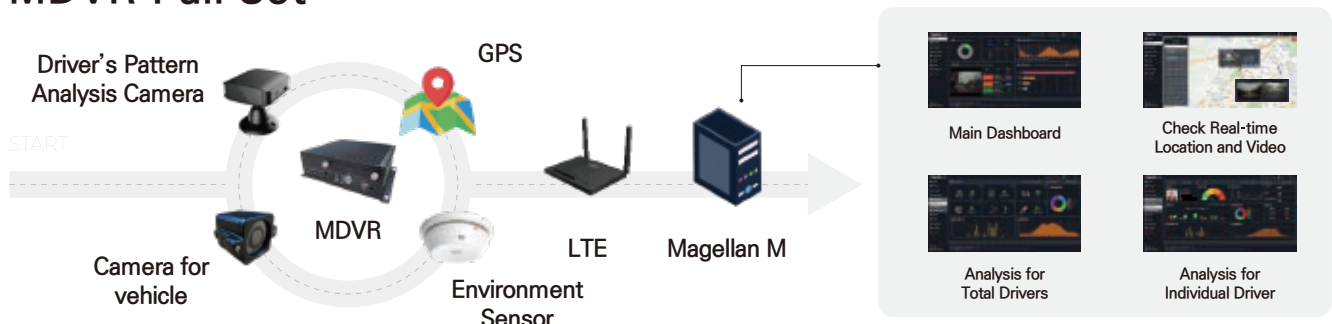


6. Analysis for Individual Driver

Driver's Pattern Analysis ONLY



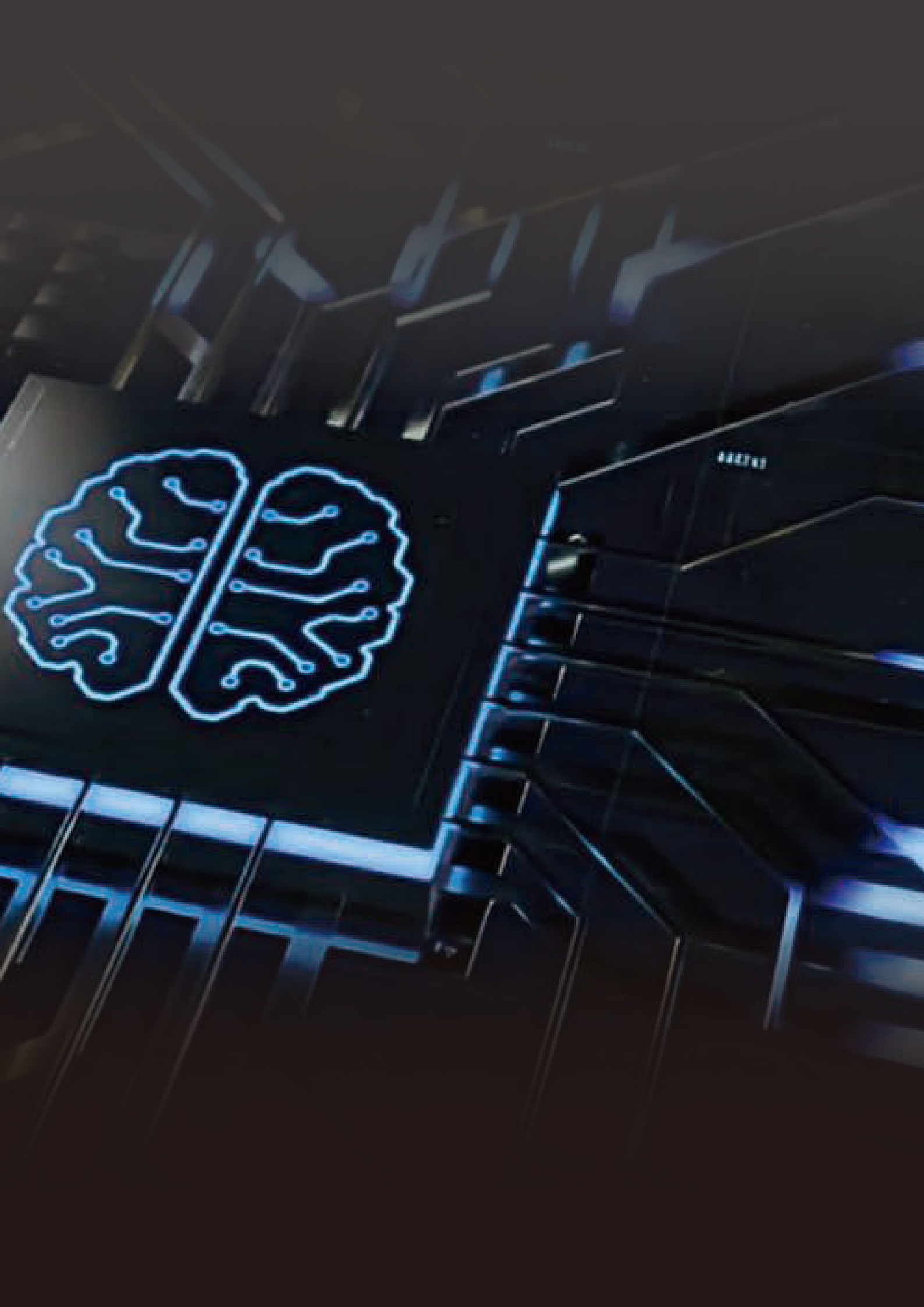
MDVR Full Set



AI Box

The background of the entire image is a dark, almost black, space filled with a complex, three-dimensional geometric pattern. This pattern consists of numerous overlapping, rectangular and polygonal frames that appear to be made of a reflective, metallic material. These frames are illuminated from within or by an external light source, causing them to glow with a bright, cool blue light. The perspective is dynamic, with the lines and planes receding into the distance, creating a sense of depth and architectural complexity. The overall effect is one of high-tech, futuristic design.

Experience Smart AI with FOCUS AI Box.
Users can easily generate AI actions on existing systems.



AI BOX

FAI-3000
Series

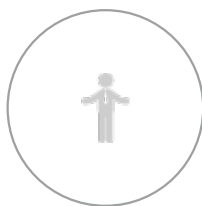
PRISM AI

- Provides intelligent video analysis function in conjunction with existing IP camera (ONVIF) and Focus NVR.
- Equipped with powerful intelligent video analysis software that can monitor, analyze, and transmit video by connecting multiple devices (NVR, DVR, IP Cameras, etc.).
- Effective operation is possible as various analyzed information can be transmitted to the cloud, UVMS event server and NVR.
- Video relay function allows simultaneous connection from multiple UVMS.
- Easy connection and setup with its own display and intuitive interface

MODEL		FAI-3004
Video	Channel	4 Ch
	SOC	NVIDIA Jetson AGX Orin
	Display Resolution	Max. 4K
	Video input	TCP/IP
	Compression	H.264
	Monitor Output	HDMI
	Playback when analyzing algorithm	Max. 1080P @ 30 fps
Interface	USB	USB 2.0 x 3 (1ea for Serial Upgrade)
	RS-485	1
	Network	100 Mbps/1000 Mbps
	Alarm In/Out	4 / 1
AI Analysis Function (Basic)		People Detection, Vehicle Detection, Parking/Stopping Detection, People Counting, Roaming Detection, Occupation Detection, Fall-down Detection
Power		12V DC, 7A
Operating Temperature/Humidity		0 ~ 40°C, 10 ~ 90% RH
Weight		1.5 Kg
Dimension (W × D × H)		180 x 226 x 76 (mm)

(*) Specification is subject to change without prior notice.

Key Features



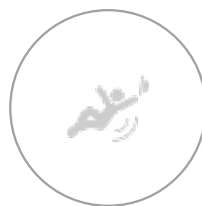
People Detection

+

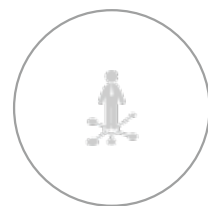


People Counting

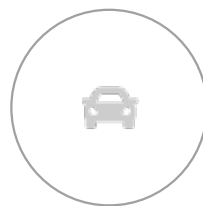
+

Fall-down
Detection

+

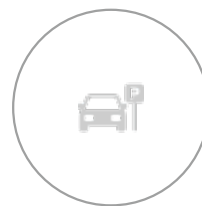
Roaming
DetectionOccupation
Detection

+

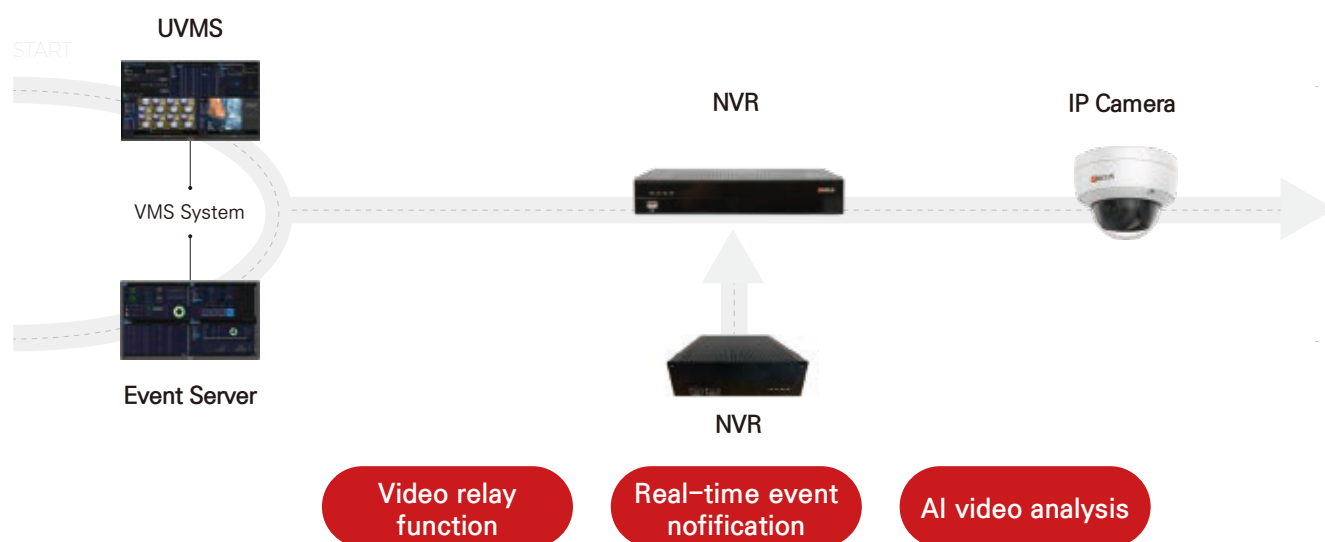


Vehicle Detection

+

Parking/Stopping
Detection

Configuration



Own Web Service Support



Real-time Web VMS

Real-time monitoring of channels being analyzed is possible.
(No additional installation is required, Using Web (Chrome))



PRISM-AI Web Setup

Setup (AI Analysis, Network, User) in the Web is possible.



AI Log Viewer

PRISM-AI Analysis log can be checked.

Applications

Access Restriction Notification
Crowd Detection
Roaming Detection
Vehicle Entrance Detection

Product List

DVR/NVR



NVR
(4/8/16/36/64 Ch)



TVI Hybrid DVR
(4/8/16 Ch)



HD Decoder
(16 Ch)



Storage Server
(128/256 Ch)

Camera



AI Indoor/Outdoor
IP Camera
(2M/5M Fixed Lens)



TVI Camera
(2M/4M)



AI Indoor IP Camera
(5M/4K)



AI Outdoor IP Camera
(5M/4K)



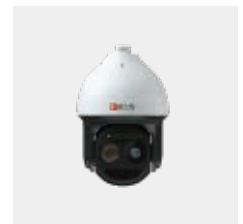
AI Thermal Camera
(Indoor/Outdoor)



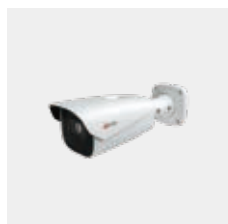
AI Object
Recognition Camera
(Indoor/Outdoor)



AI 180 Degree
IP Camera
(Indoor/Outdoor)



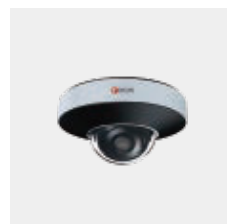
4x Optical AI PTZ
Camera
(4M 37x Optical Zoom)



AI Face Recognition
Camera



Multi-Functional
AI Camera
(Falling Down/
Frame Detection, etc.)



AI Elevator Camera
(Object Recognition
/Scream Detection)



LPR Camera

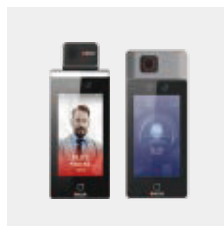
Face Recognition Terminal



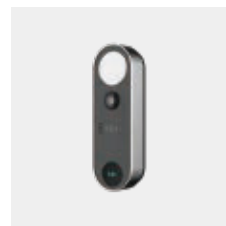
4 Inch Face
Recognition Terminal



7 Inch Face
Recognition Terminal



7 Inch Thermal Face
Recognition Terminal



IP Intercom
(AI Doorbell)

Smart Factory & Mobility



All-In-One Monitor
Mobile DVR
(4Ch)



All-In-One Monitor
Mobile DVR
(4Ch, IP68)



All-In-One Monitor
Mobile DVR (4Ch)



All-In-One Monitor
Mobile DVR
(4Ch, SSD Built-in)



Mobile DVR
(2Ch)



Mobile DVR
(4Ch)



Mobile DVR
(8Ch)



Driver Behavior
Analysis Camera



Vehicle Camera
(2MP, Indoor)



Vehicle Camera
(2MP, Outdoor, IR)



Vehicle Camera
(2MP, Outdoor)



Vehicle Camera
(2MP, Outdoor, IR)

IoT/Sensors



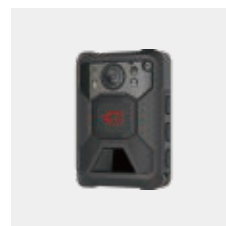
IoT Box
(4/16 Ch)



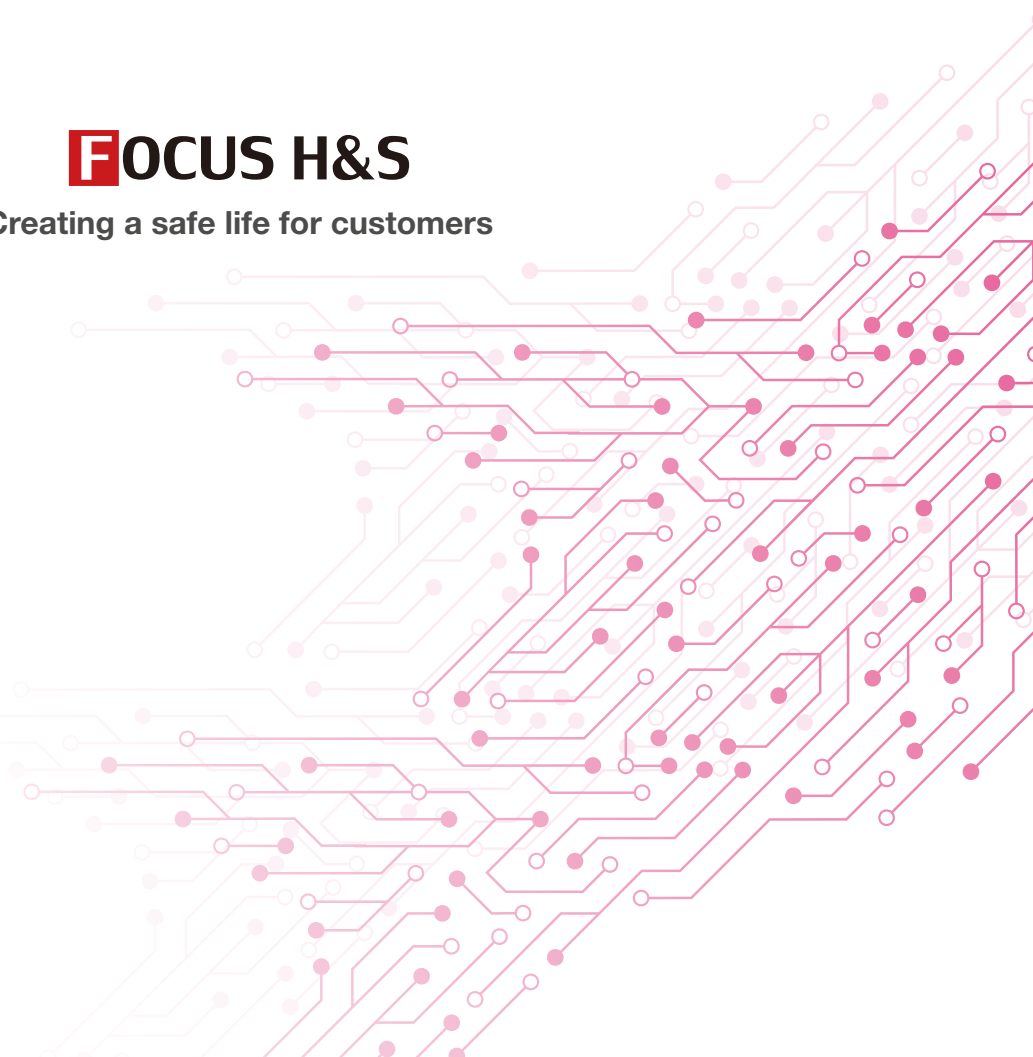
AI Box



Environment Sensor



Body Cam



FOCUS H&S

Creating a safe life for customers

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KOSDAQ
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INNOBIZ
기술혁신영종소기업

Venture Enterprise
벤처확인기업

ISO 9001
인증

ISO 14001
인증

