Tech-Guide

Technical Guide by WEBGATE

WEBGATE

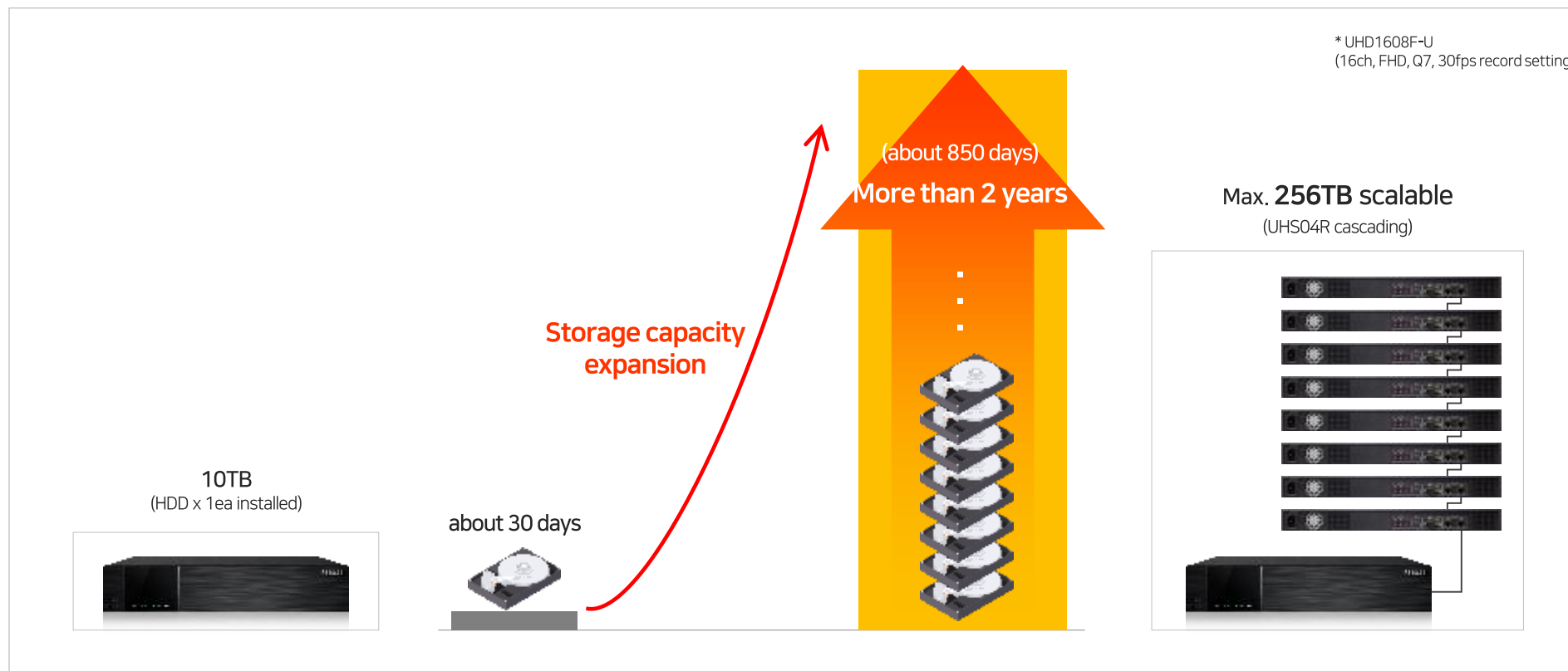DVR   CAMERA   ACCESSORY   SOFTWARE

Storage capacity expansion

Storage capacity supports more than 2 years with storage expansion

- Storage capacity expansion enables sufficient storage time and efficient data management
- Scalable up to 256TB with optional network storage (UHS04R)
- Max. 8 x UHS04R units cascading

* For limited models only

* UHD1608F-U
(16ch, FHD, Q7, 30fps record setting)

(about 850 days)
More than 2 years

Max. **256TB scalable**
(UHS04R cascading)

Storage capacity expansion

10TB
(HDD x 1ea installed)

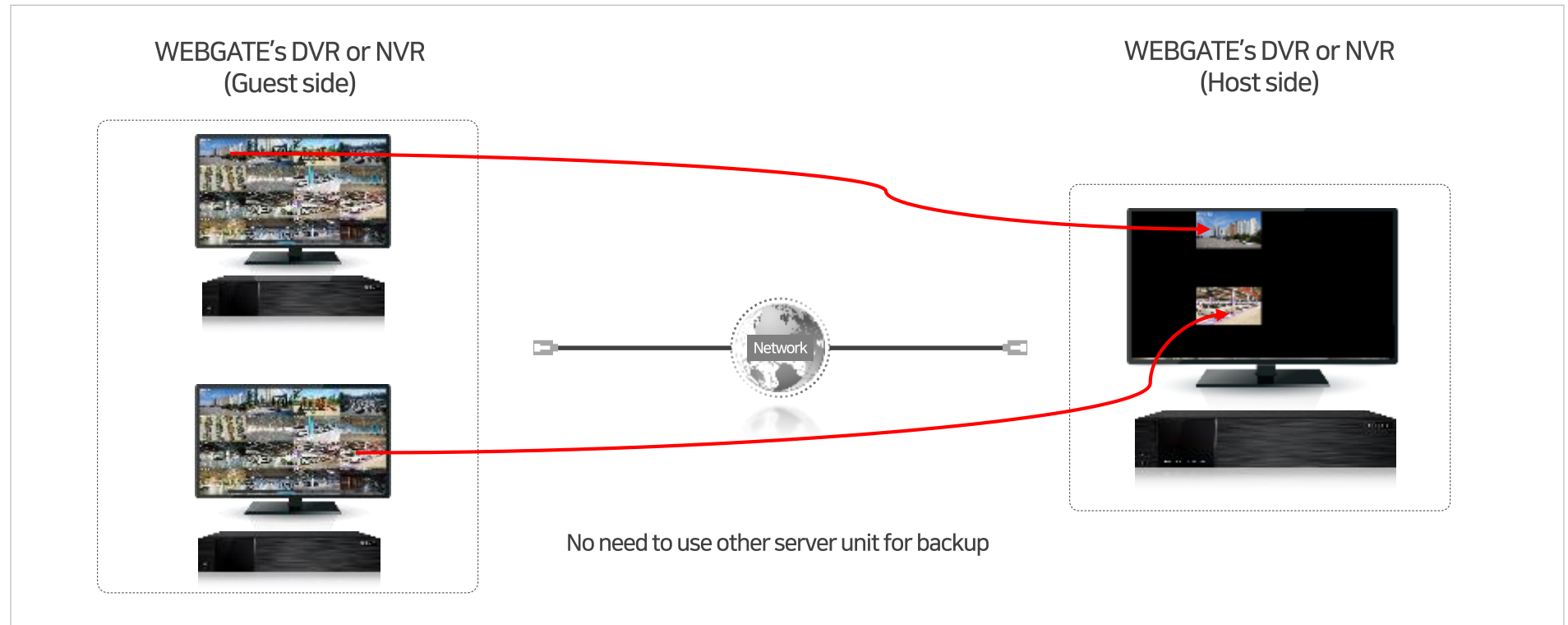about 30 days

Web-based viewer HTML5(Active X free)

Monitoring and control of recorder are enabled on web-based viewer

- Free Active X : HTML5 webviewer supporting monitoring and control via webbrowser without installing Plug-in(Active X)

- DVR access via various webbrowsers such as Chrome, Microsoft Edge, NAVER whale, Firefox regardless of Windows or Mac OS

- Provides features to control DVR such as full-frame monitoring / playback, PTZ control and data backup

Unit to Unit record
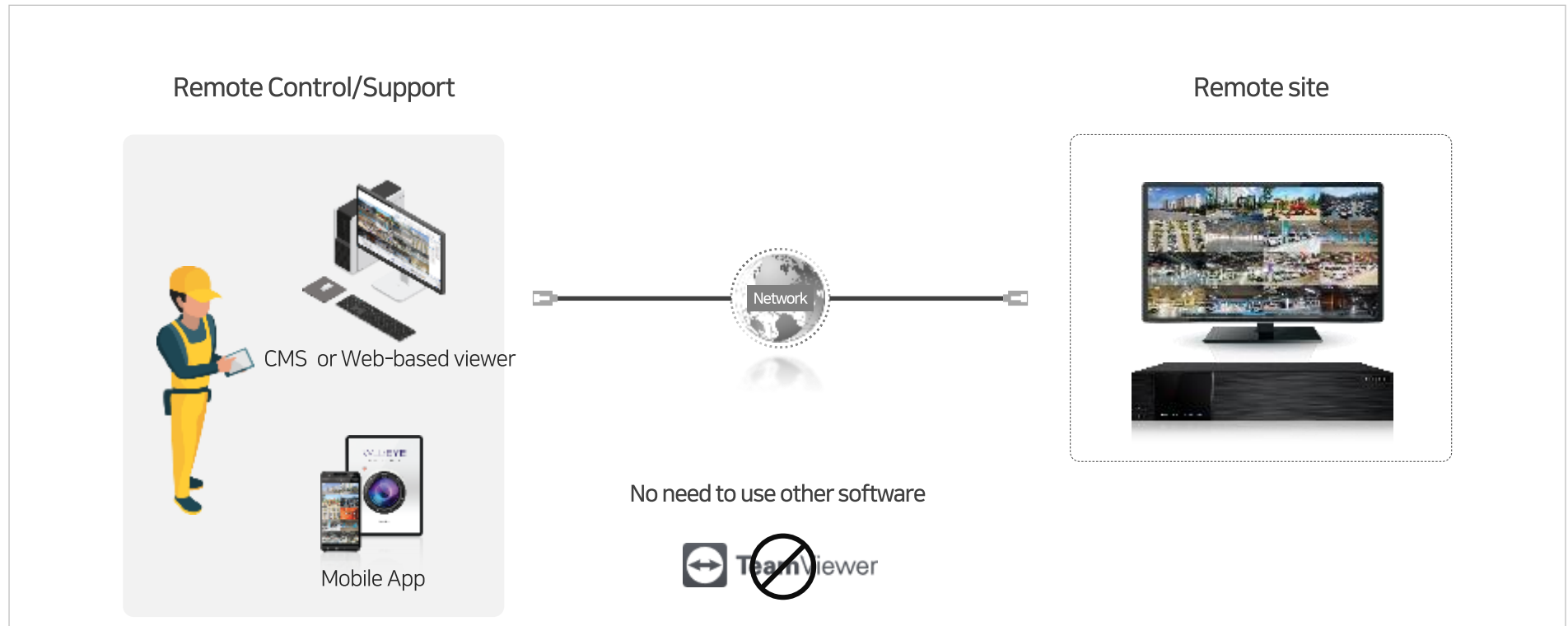
The simultaneious record or backup

- The certain local channels of one unit can be registered to other unit over the network
- Select certain channel from Guest side (DVR or NVR) of WEBGATE then register and map those channels in Hose side
- Video channels recording simultaneously on several other units to preserve data more securely (Redundancy backup purpose)

WEBGATE's DVR or NVR
(Guest side)

WEBGATE's DVR or NVR
(Host side)

Network

No need to use other server unit for backup

Remote DVR

Makes remote support and control easy through dedicated WEBGATE VMS software

- DVR output screen along with OSD menu can be shared once remote access to NVR/DVR is made over the network for control anytime, anywere

- Install a dedicated VMS(Control Center) or smartphone(Webeye) to remotely manage image and control devices(DVR or NVR)

- Remote supports such as diagnosing setup error and supporting services without visiting the installation site

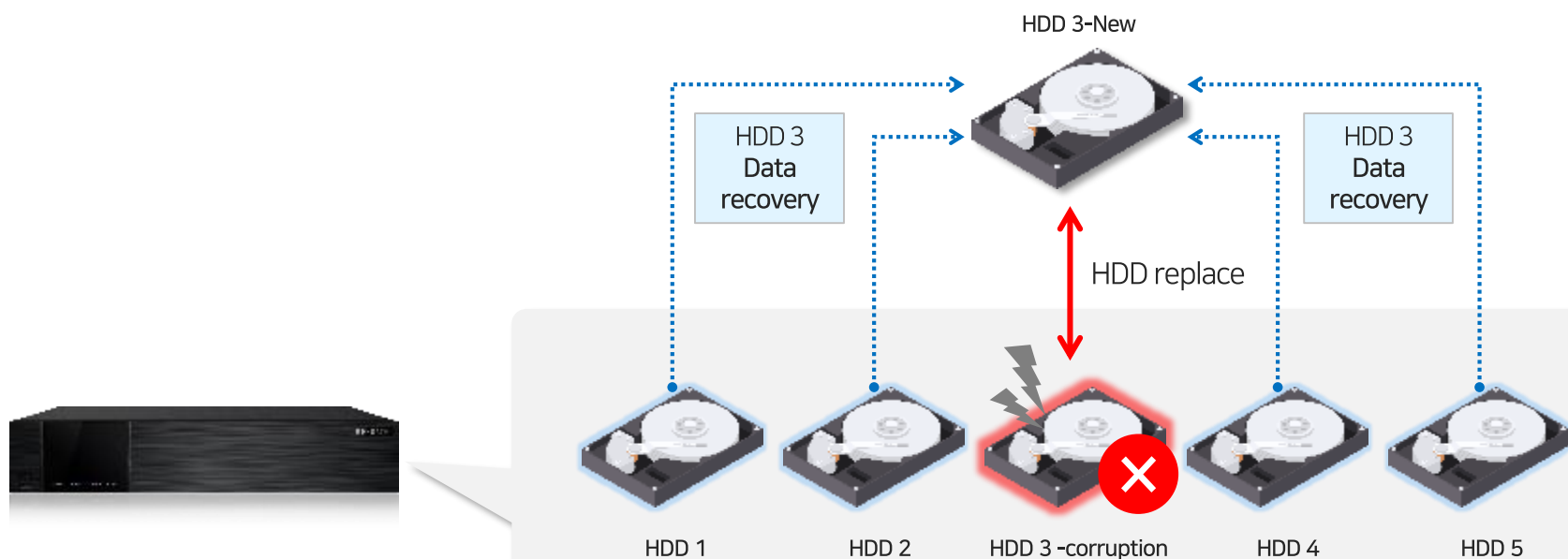- Save time and cost, improves end-user's satisfaction

Remote Control/Support

Remote site

CMS or Web-based viewer

Network

Mobile App

No need to use other software

TeamViewer

Improve storage reliability (RAID feature)

Improves storage reliability by supporting recovery from corrupt recorded data

- Supports RAID feature to recover recorded data on HDD from corruption
- Improves reliability for recorded data
- Provides RAID level 1, 5, 10 from hardware chipsets

* For limited models only

HDD 3-New

HDD 3
Data
recovery

HDD 3
Data
recovery

HDD replace

HDD 1   HDD 2   HDD 3 -corruption   HDD 4   HDD 5

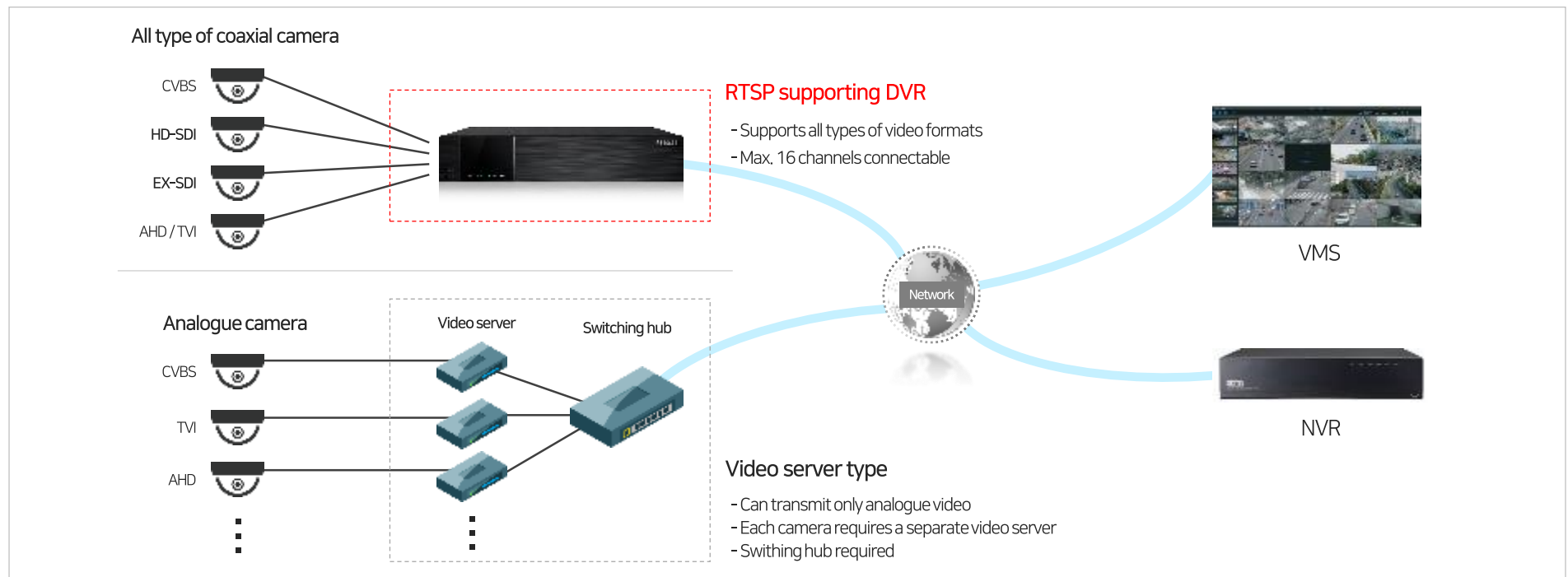* RAID5 configuration example

Supports RTSP streaming on all channels

RTSP all channels support enables expansion and integration of monitoring system

- RTSP (Real Time Streaming Protocol) : real-time streaming protocol
- Integration of coaxial DVR into monitoring system
- Stream entire live video from DVRs
- Interlocking VMS with NVR to facilitate efficient monitoring system deployment and expansion
- Can transfer 1080p images with up to 240fps over the network

All type of coaxial camera

CVBS

HD-SDI

EX-SDI

AHD / TVI

RTSP supporting DVR
- Supports all types of video formats
- Max. 16 channels connectable

VMS

Network

Analogue camera   Video server   Switching hub

CVBS

TVI

AHD

NVR

Video server type
- Can transmit only analogue video
- Each camera requires a separate video server
- Swithing hub required

One-click upgrade and recovery !!

One-click upgrade the unit with the latest firmware enables easy on-site technical support

- Firmware upgrade with ease → Firmware upgrade only with single USB memory

- The single USB memory makes firmware recovery and unit initialization and recovery easy

- Simplifies camera operation and firmware upgrade from central monitoring software over the network without direct camera access

    → Remote firmware upgrade on the camera through DVR/NVR

F/W Upgrade Progress : [029]% Completed

Firmware

USB
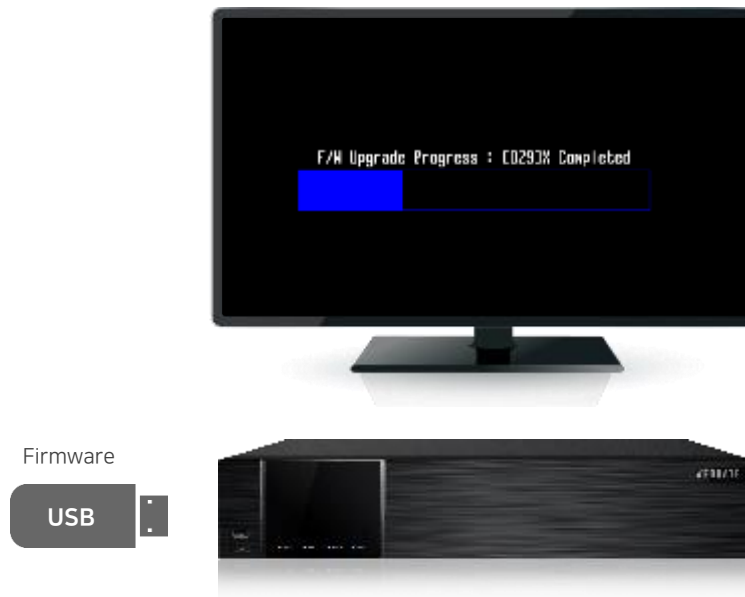
EX-SDI SPOT output

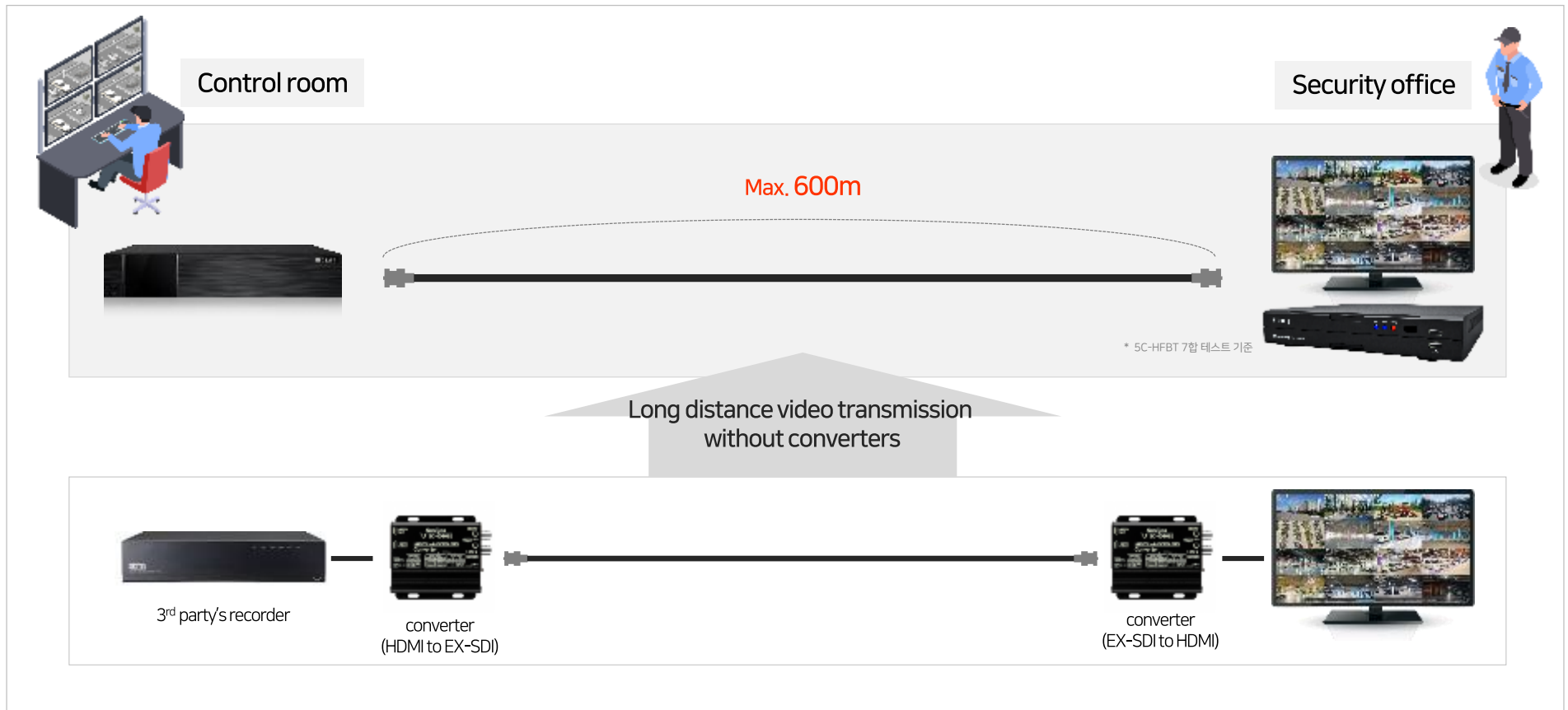## Long-distance monitoring at reasonable cost without additional equipment

- BNC output for long distance transmission (HD-SDI, EX-SDI, EX-SDI2.0)
- SDI output enables long distance monitoring (about 600m) environment at a reasonable cost without the need for a separate converters

* For limited model only

Control room

Security office

Max. 600m

* 5C-HFBT 7합 테스트 기준

Long distance video transmission
without converters

3rd party's recorder

converter
(HDMI to EX-SDI)

converter
(EX-SDI to HDMI)

Intelligent power failure recovery (IPFR)

IPFR minimizes video loss in the event of a power outage

- IPFR (Intelligent Power Failure Recovery) technology applied

- Apply SMPS and protection circuits to control HDD in case of power outage

- Unlike conventional DVRs, where the recorded data is lost in case of unexpected power outage, DVR with IPFR technology can minimize data loss by recovering damaged data blocks up to before the last image of the frame
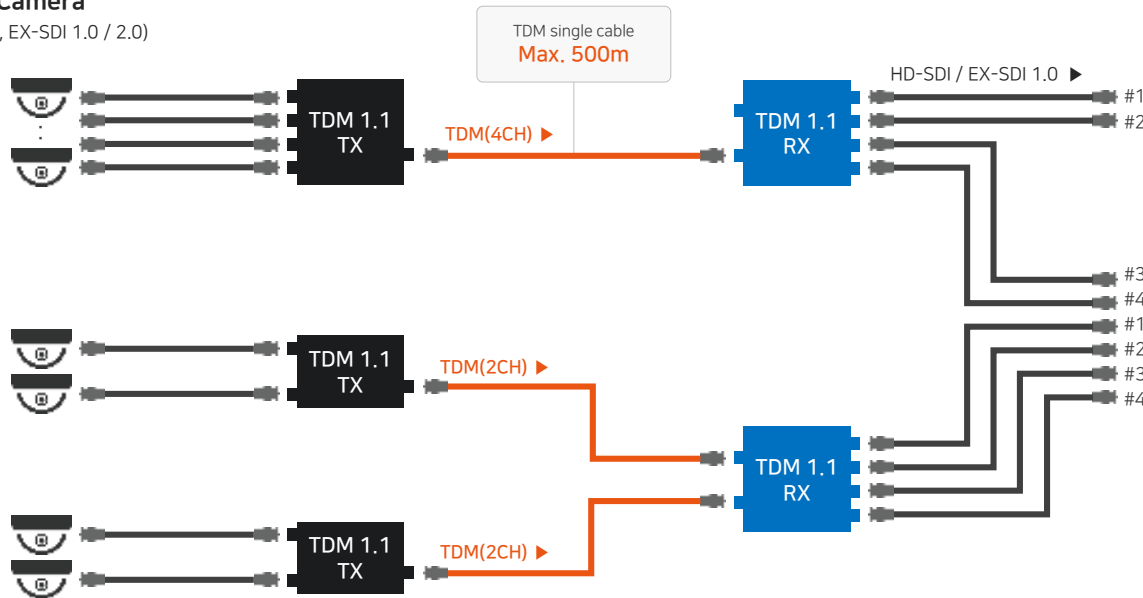
EX-SDI TDM 1.1 supports

Transmit video signal up to Max. 500m over single coaxial cable

- Receives Max. 4 channel's HD-SDI, EX-SDI1.0 / 2.0 video signal to transmit them up to Max. 500m over single coaxial cable

- Converts TDM signals received from TDM transmitter into HD-SDI or EX-SDI formet to output it into 4 separated video signals

- Efficient to save cable cost and installation time for long distance and large installation sites

* For UHD DVR series only

(Example)

Camera
(HD-SDI, EX-SDI 1.0 / 2.0)

TDM single cable
Max. 500m

DVR

HD-SDI / EX-SDI 1.0 ▶

TDM 1.1 TX

TDM(4CH) ▶

TDM 1.1 RX

#1
#2

#3
#4
#1
#2
#3
#4

TDM 1.1 TX

TDM(2CH) ▶

TDM 1.1 TX

TDM(2CH) ▶

TDM 1.1 RX

* Based on 5C-HFBT 7 cable
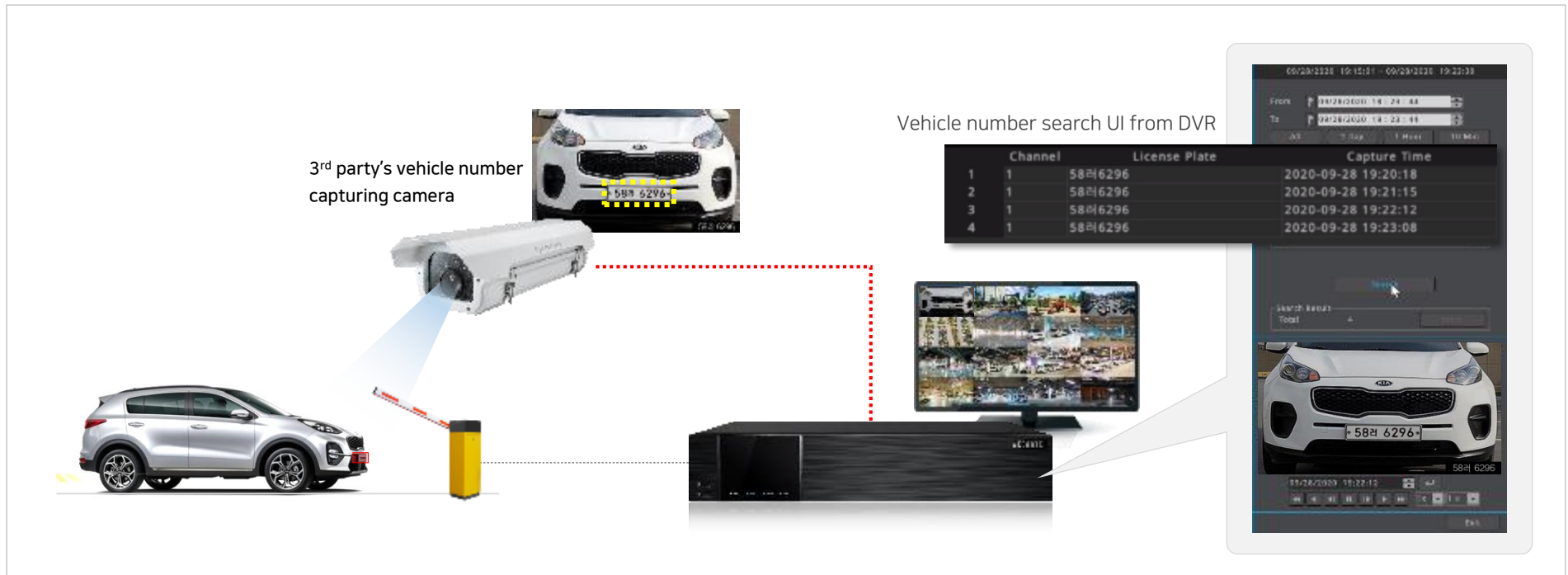
Intelligent vehicle number recognition CCTV system

Intelligent vehicle number recognition CCTV system

- Vehicle number recognition and CCTV function are combined to provide optimal crime prevention effect
- Ease of vehicle's entry and exit management
- Build entry and exit system and management at low cost
- Convenient search feature by vehicle's number from the database stored in DVR
- Interlockable with breaker

* Additional development is required

3rd party's vehicle number capturing camera

Vehicle number search UI from DVR

Channel	License Plate	Capture Time
1	1	58러6296	2020-09-28 19:20:18
2	1	58러6296	2020-09-28 19:21:15
3	1	58러6296	2020-09-28 19:22:12
4	1	58러6296	2020-09-28 19:23:08

58러 6296

USB keyboard support

Entering information for large amount of channels easily with USB keyboard

- Connect the USB keyboard directly to DVR
- Entering or changing channel's name easily
- Supports English / Korean

Auto IP (Plug & Play)

Easy setup with no expertise

- Plug and play method without need of expertise about network (Auto IP)
- IP setup is made automatically upon the connection of IP camera to NVR's PoE port
- AUTO IP feature works once the connected camera boots up
- The WEBGATE's IP camera can be connected directly without any setup required
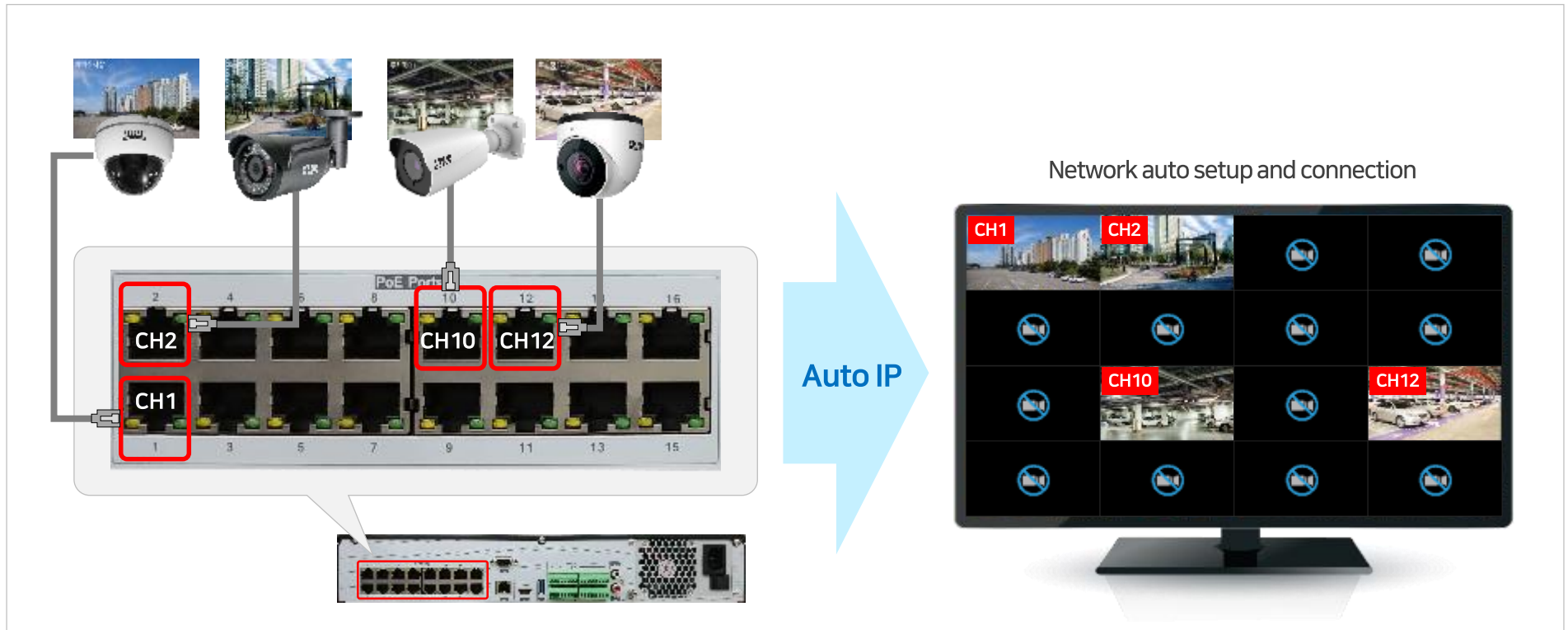
* For UHN PoE NVRs only

Auto IP

Network auto setup and connection

Image masking backup

Masking backup considering privacy issue

- Protects privacy by masking and back up areas unrelated to the purpose of back up video
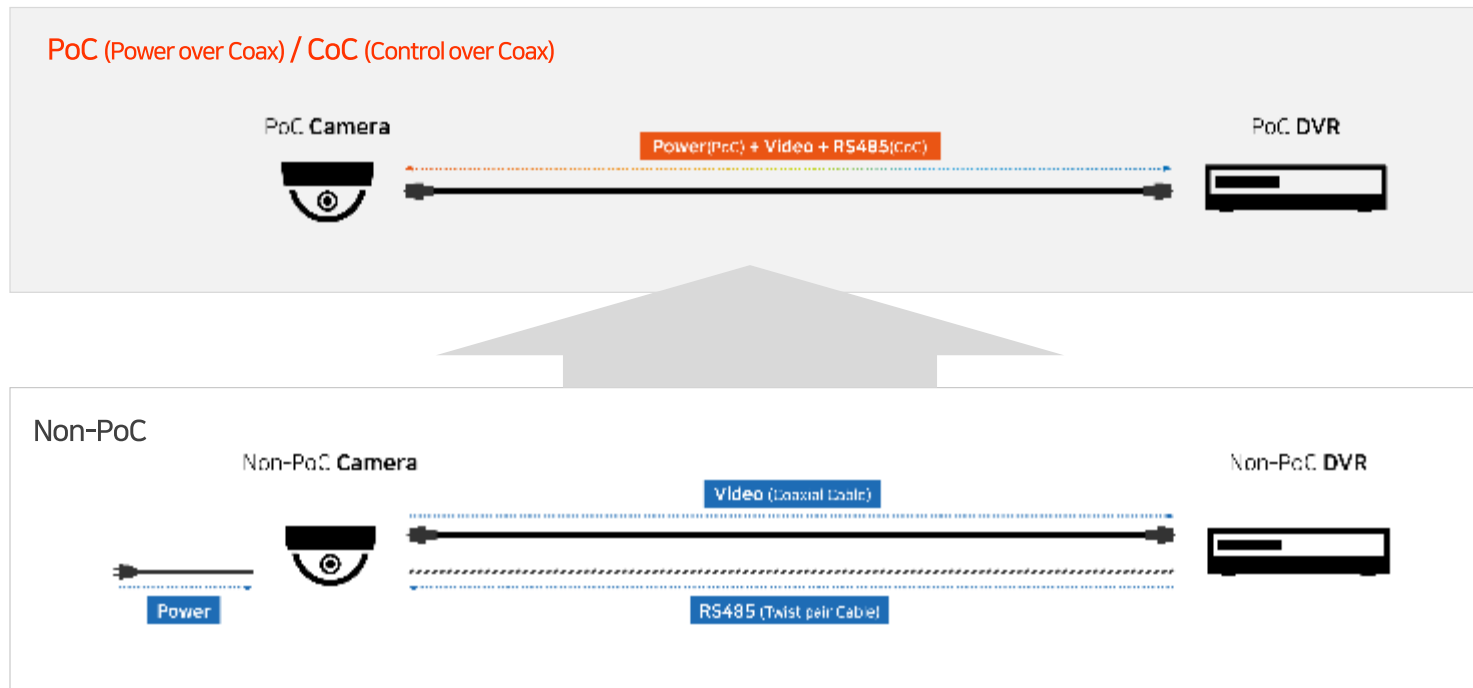- Set up preferable masking area by user

Setup masking area

Original image

Backup masking video

One Cable Solution for power and control via single cable

One Cable Solution to enter power and control signal to camera via single cable

- No need of additional power installation, supporting for efficient operation of the monitoring system
- Enters power to the camera over coaxial cable / send control commands
- Easier installation and operating environment than conventional analog systems

* For UHD PoC DVR only

PoC (Power over Coax) / CoC (Control over Coax)

PoC Camera   Power(PoC) + Video + RS485(CoC)   PoC DVR

Non-PoC

Non-PoC Camera   Video (Coaxial Cable)   Non-PoC DVR

Power   RS485 (Twist pair Cable)

Development of interlocking with specialized devices

Homenetwork / IP emergency bell solution

- Interlocking 3rd party's devices with WEBGATE DVR to establish efficient monitorying system
- Interlocking process with some of leading 3rd party's homenetwork and IP emergency bell has been done
- Newly development for interlocking with 3rd party's devices through in-house development resources

Homenetwork interlocking solution

- Video recorded in CCTV installed in the complex can be monitored through the wallpad devices

Site (Camera)   Monitoring room (DVR)

CCTV footage

Household (Wallpad)

IP emergency bell interlocking solution

- The emergency bell alarm triggered will be transmitted through CCTV screen
- Instant alarm transmission to remote PC and Smartphone through CMS

Site (Emergency bell)

SOS

Emergency bell alarm

Alarm signal

Monitoring room (DVR)   Remote (PC/Smartphone)

Time synchronization on all channels & Precise RTC

Synchronize precise time on all channels with ease

- Use NTP to easily synchronize devices connected to network
- Easy time synchronization on all monitoring channels → Gain reliability when searching for associated channels of same time zone
- Precise RTC (Real Time Clock)
- Client or Server mode (selectable)
- Time synchronization with GPS (Optional GPS antenna required)
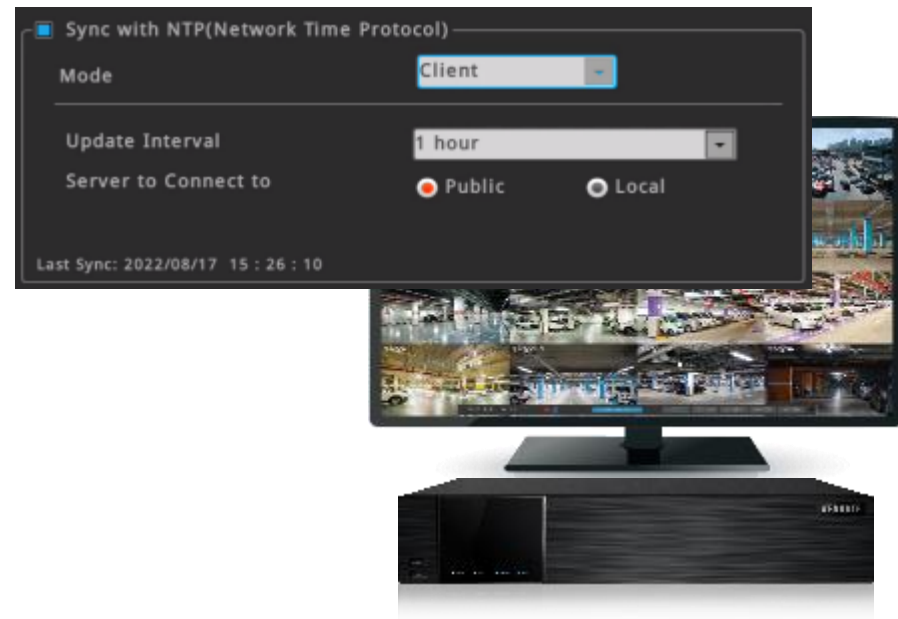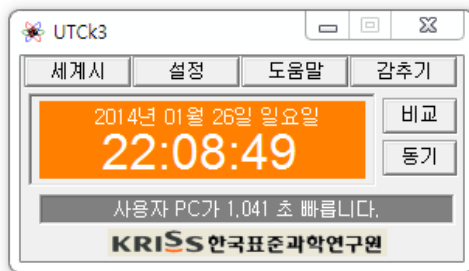
Image customize

Customizing disabled video channel with image file

- Boot up image and disabled video channels can be customized with preferable image

- It can be used for various purpose such as providing information or promotion purpose
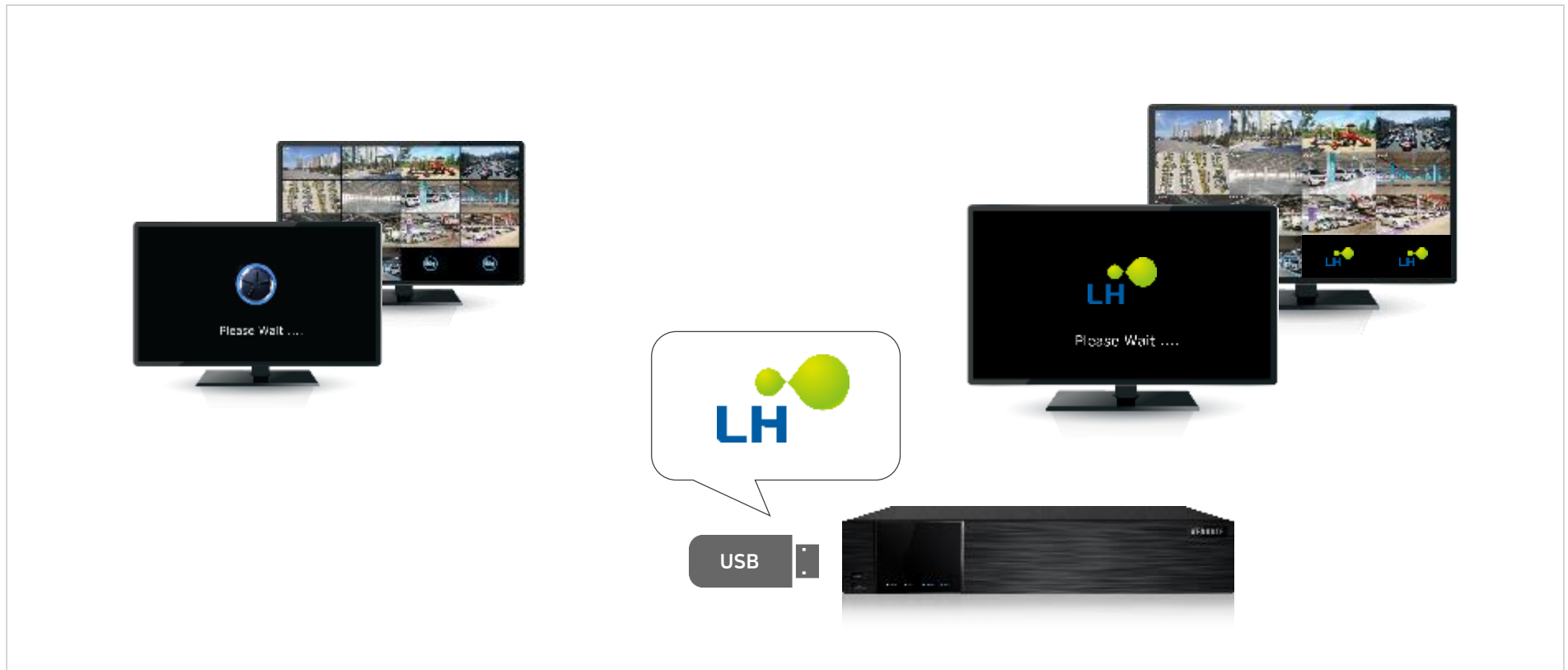
Compatibility with 3rd parties IP cameras

Compatibility verification with more than 150 IP cameras, about 50 domestic and foreign companies

- Support for the latest version of ONVIF, NVR standard protocol, compatible and interoperable with 3rd parties IP cameras
- Compatibility verification completed through interlocking test for about 50 domestic and foreign companies and 150 products
- Can be additionally developed for compatibility upon request

The compatibility list is found on the WEBGATE's website

www.webgateinc.com - [support] - [technical support] - [technical data] - [IPC compatible list]
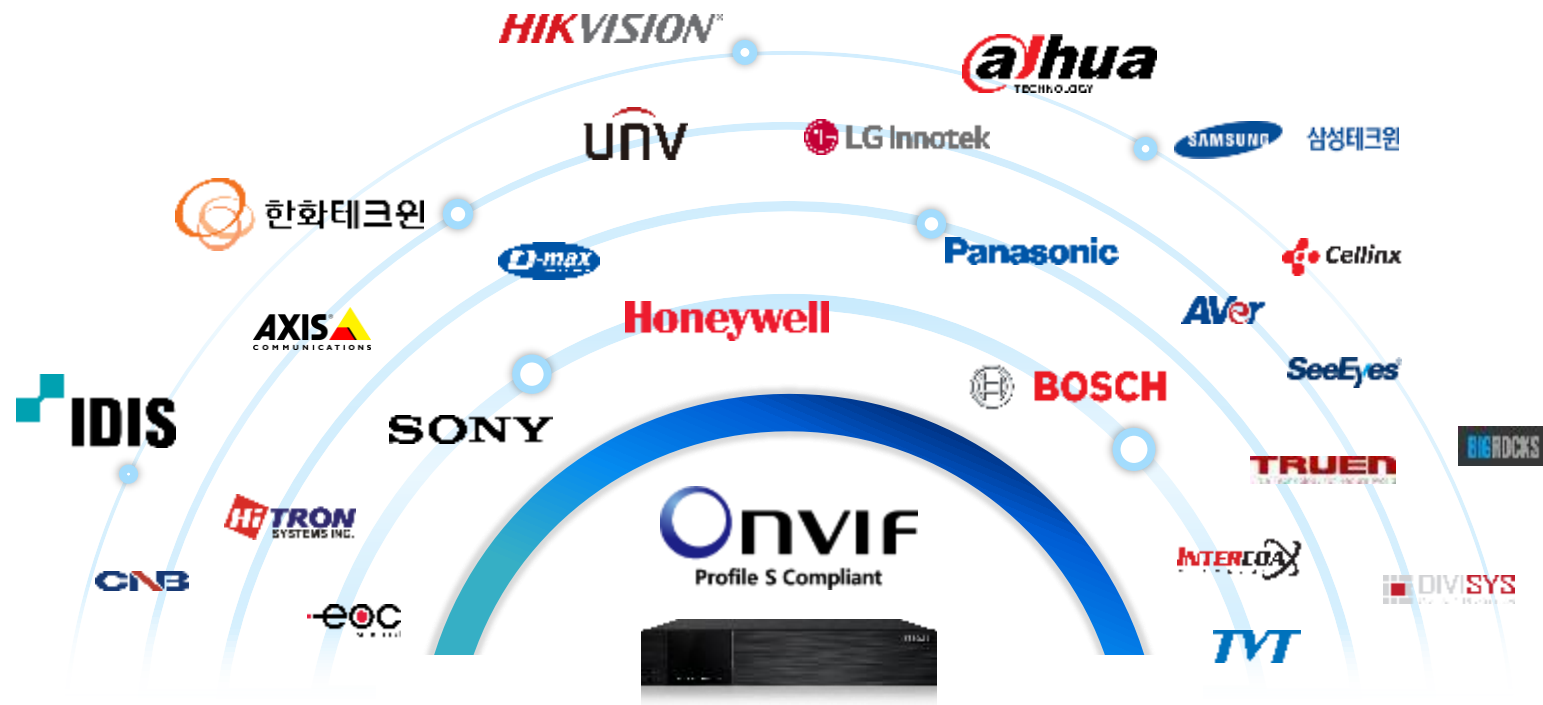
Universal DVR

Support for a variety of video formats

- Universal DVR can cover any site, no matter what type of the camera is
- Supports a wide variety of video formats from CVBS to 4K UHD including IP camera without restrictions of channel configuration

* For UHD Hybrid DVRs only

Video Format

한화테크윈

HIKVISION

4M QHD

8M UHD

HD-SDI

AHD

Resolution

TVI

Manufacturer

EX-SDI

2M FHD

CVI

eyenix
the great eyes

고민없이 하나로 한번에!

All in One, Only One!

dahua
TECHNOLOGY

CVBS

IP 카메라

WEBGATE

Recorder Select Guide

Digital Video Recorder

Model	HAC450F-V3	HAC850F-V3	HAC1650F-V3	HDC442F-D	UHD402F-U	UHD804F-U	UHD1608F-U
Number of channels	4	8	16	4	4	8	16
Number of HDDs	1	1	2	1	2	2	6
Formats	HD Analog (TVI, AHD, CVBS)			Digital (EX-SDI)	Hybrid (EX-SDI, TVI, AHD, CVBS)		
Audio	4	8	8	X	1	1	4
I / O	O	O	O	X	O	O	O
Storage Expansion via optional UHS04R	X	X	X	O	O	O	O
HTML-5 active-x free viewer	O	O	O	O	O	O	O
Unit to Unit backup or record	O	O	O	O	O	O	O
Remote DVR	O	O	O	O	O	O	O
Built-in hardware RAID1,5,10	X	X	X	X	X	X	O
RTSP streaming	O	O	O	O	O	O	O
Built-in TDM receiver	X	X	X	X	O	O	O
Boot logo, empty channel customize	O	O	O	O	O	O	O
IP camera connection	O	O	O	O	O	O	O

Recorder Select Guide

Network Video Recorder

Model	UHN404P-H1-V3	UHN808P-H1-V3	UHN1616P-H2-V3	UHN3616P-H4	UHN6400-H8	UHN6400-H6R	UHN6400-H16S
Number of channels	4	8	16	36	54	64	64
Number of HDDs	1	1	2	4	8	6	16 (How Swap)
PoE	O	O	O	O(16 PoE)	X	X	X
Audio	1	1	1	1	1	1	1
I / O	O	O	O	O	O	O	O
Storage Expansion via optional UHS04R	X	X	X	O	O	O	O
HTML-5 active-x free viewer	O	O	O	O	O	O	O
Unit to Unit backup or record	O	O	O	O	O	O	O
Remote DVR	O	O	O	O	O	O	O
Built-in hardware RAID1,5,10	X	X	X	X	X	O	X
RTSP streaming	O	O	O	O	O	O	O
Boot logo, empty channel customize	O	O	O	O	O	O	O