



National Popular Security Camera

# Netween Cube

Presented by Netween Inc.

[www.netween.co.kr](http://www.netween.co.kr)



netween

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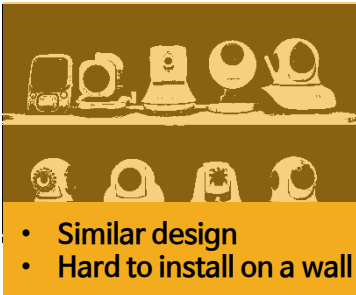
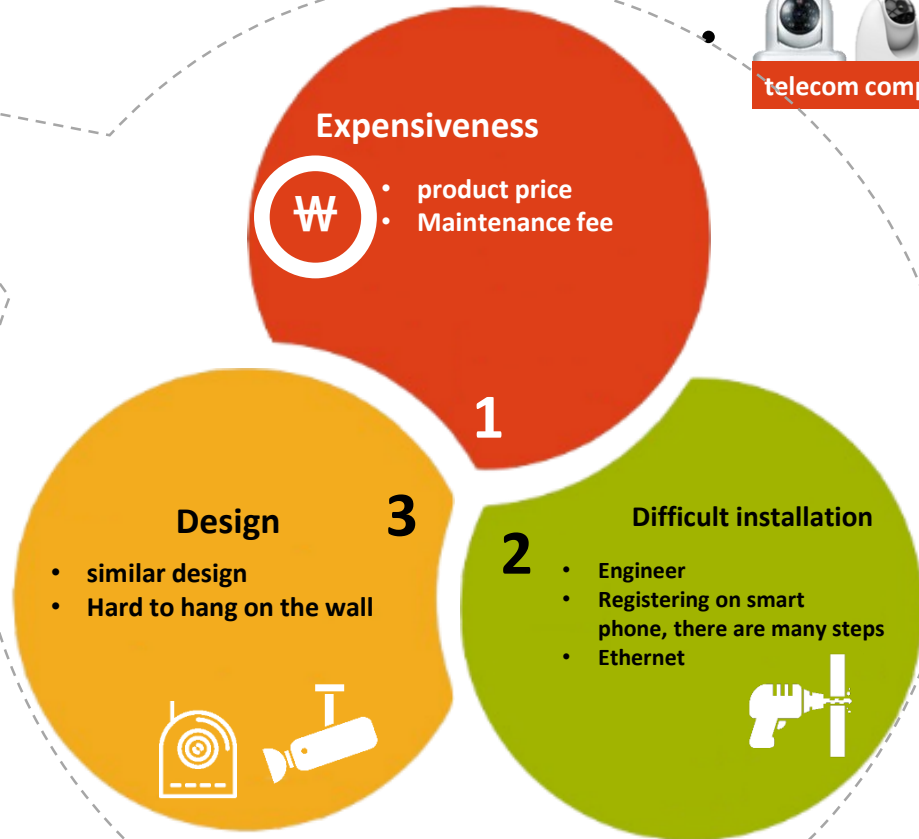


01

## Current Market

- Security camera in the market
- Security Camera, More features to think about

# Security camera in the market



p/w, serial number.. a lot of steps

# Security Camera, More features to think about



Intelligent Product



# 02

## Product Innovation

- Key point
- Netween Inc.'s technology



## Economical

1

- **Reasonable Price**
- No additional maintenance fee
- Saving video on a SD card and online server
- **OnVIF** – NVR : Saving the labor fee



## Netween technology

2

- **total solution**: Netween Inc.has developed server, app, firmware, hardware. There is no company like us in South Korea
- To be continued upgrade
- Releasing South Korea, Netween Inc.made a contract with foreign company.



## Customer Satisfaction

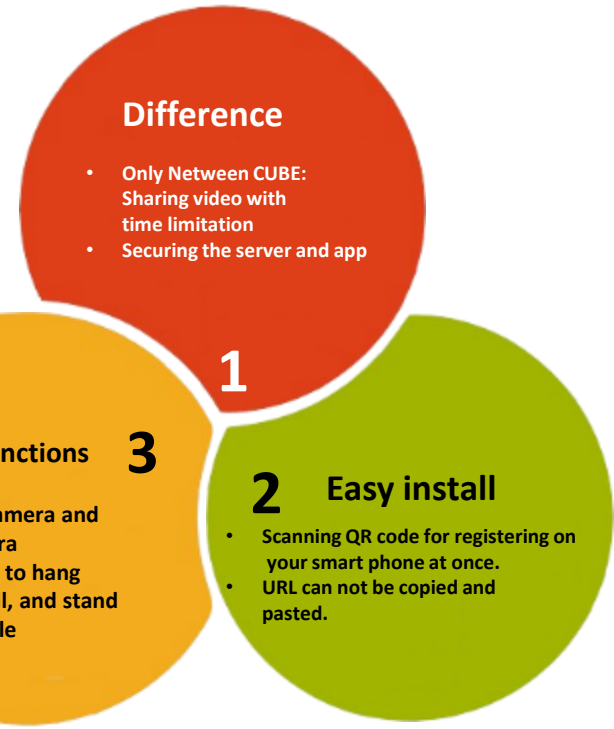
3

- **easy install** : Read the QR Code on app 'netween cube'
- easy register: Sending the URL on SNS, SMS and e-mail
- Sharing the video(Live Streaming): Setting the limitation and sharing the video to someone.



# Netween Inc.'s technology

## Netween Inc.'s individual way



Total solution made by Netween Inc.

We developed this solution by ourselves.

Based on our technical skills, we can upgrade sustainably.



# Netween Cube features

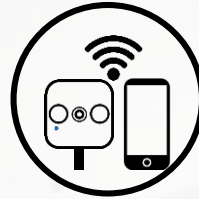
## Difference



Enhanced Server Security  
(App & Server only for CUBE)



Developing  
Server, App, H/W



Local video view



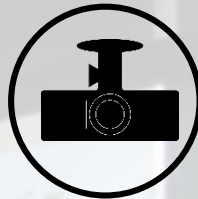
Live Streaming



Adaptable to  
external mobile battery



Localized Zoom



dashboard camera

## Easy install



Wi-Fi  
Plug and Play



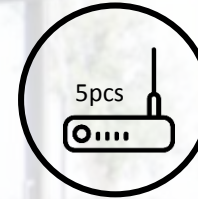
QR code  
registration



Plug n Play



Easy Registration



Register on 5 routers



Light Weight

## variety of functions



Motion detection and alert



Interactive communication



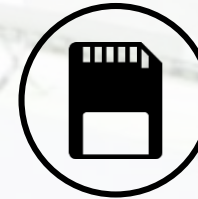
HD video



Powerful IR-ARRAY  
20m night vision



Divided screen



Support  
micro 64 GB SD card

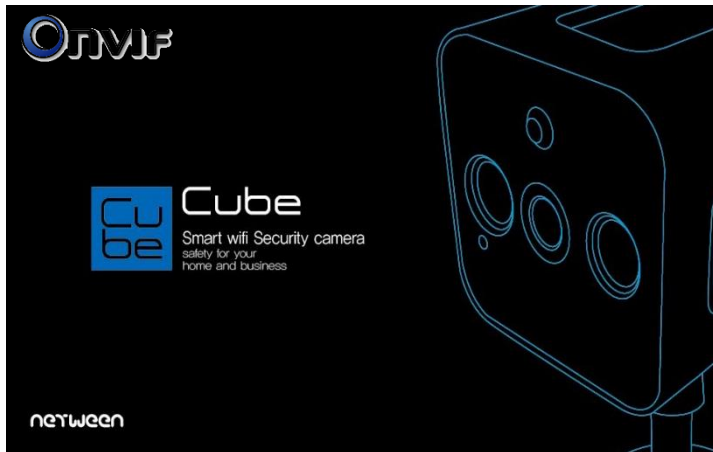


Motion push alarm

# 03

## Intelligent Product

- Differences
- Easy install
- Variety function



## | Netween i-pro



## | Netween extension



## | Netween cube

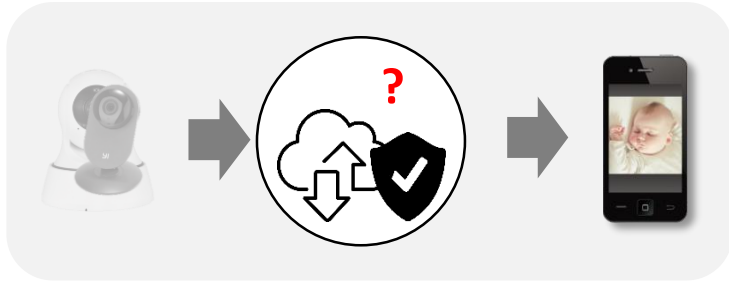


Designed by Netween Inc.

We made our own design. It is totally different from the others.

We consider customer satisfaction.

# Netween Inc.'s own server



VS



Do you think servers shared by many companies are secure?

We dedicated server for "Cube" guarantees security and safety.



## Secure Server, uninterrupted video streaming

Netween Inc.'s own server will keep your video secure.

For uninterrupted video streaming, Netween Inc. services and maintains the server.

With "Cube" app, you can continuously monitor video streaming.



### Netween Total Solution

Firmware, apps, server, and general hardware are directly developed at Netween Inc. Institute. Therefore Netween Inc. is available to update continuously such as new consumer business, enhancements, and additional new features.

# Enjoy together with live streaming

A family reunion held this time,  
I want to show my child from  
abroad..  
Is there any way?

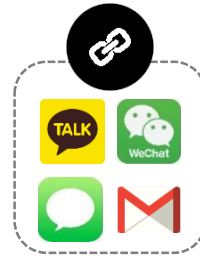


If camera is registered to parents, our  
daily life of couple will be seen...  
Is there any way to show only child?



## STEP 1

Setting time  
of video sharing



## STEP 2

Sending invitation URL  
through text



## STEP 3

Connecting Cube app/  
Sharing video



## Live Streaming to share moments

What if you want to see family gatherings when you're overseas?

What if you want to avoid hassle of registering your parents smartphone and yet still want to show your kids?

With live streaming you can protect privacy but still share memorable moments.



You can use the URL only one time. It can't be copied and pasted.

# Outdoor usage of Cube (Local Video View)



Local video view



## Local Wi-Fi function in outdoor environment

Even in an outdoor environment, without wireless internet, Cube can be connected to smartphone through local wi-fi connecting function and use streaming service. (Up to 50m)



Local Video View: Camera send the video to smartphone without WiFi.





It is fine without outlet.

You can use the portable battery or PC.



# Portable dash cam



ex)



- continuous recording  
2017-01-25 15:02

- motion recording  
\*recording one minute after detecting motion.
- night recording  
2017-01-28 23:24



Take out the CUBE and use wherever you want to record.

- It works with a power bank anywhere. (5,400mA ,nine hours)
- Non-WiFi place is fine, too!
- Just touch a reset button and turn on like a router. It sends video without WiFi up to 50m.
- Playing the video, there are preview image.
- **It can be downloaded a record video in a smartphone without the WiFi.**



VS



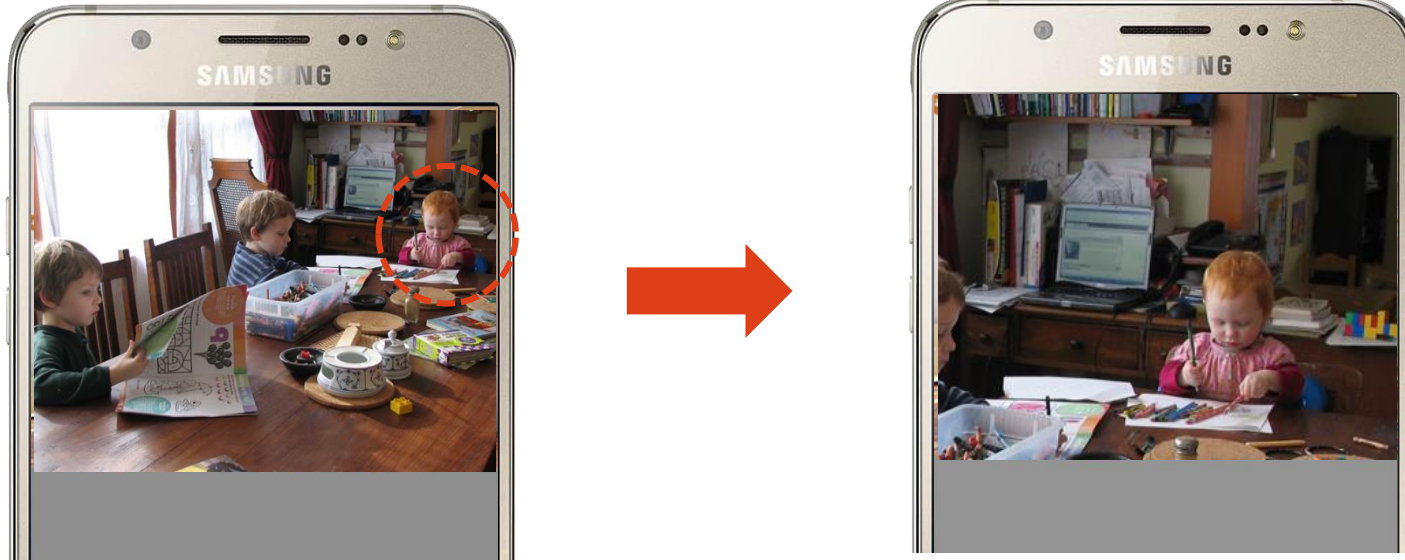
Dash cam

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• No limitation of place.</li> <li>• Power bank (5400mA, 9 hours)</li> <li>• thumbnail</li> <li>• Playing the video from the motion</li> <li>• Download the video on a smartphone</li> </ul> | <ul style="list-style-type: none"> <li>• Only can be used in a car.</li> <li>• Playing whole video.</li> <li>• Hard to move the records.</li> </ul> |
|---|---|

**[Continue]**

- For catching a little motion, it will be made more sensitive with PIR sensor.
- When it catch a motion, recording video immediately.
- Waterproof
- Putting on a Temperature-Humidity sensor, you can check the cube cam installed place's temperature and humidity.

# Netween Cube can be seen in a bigger image in details

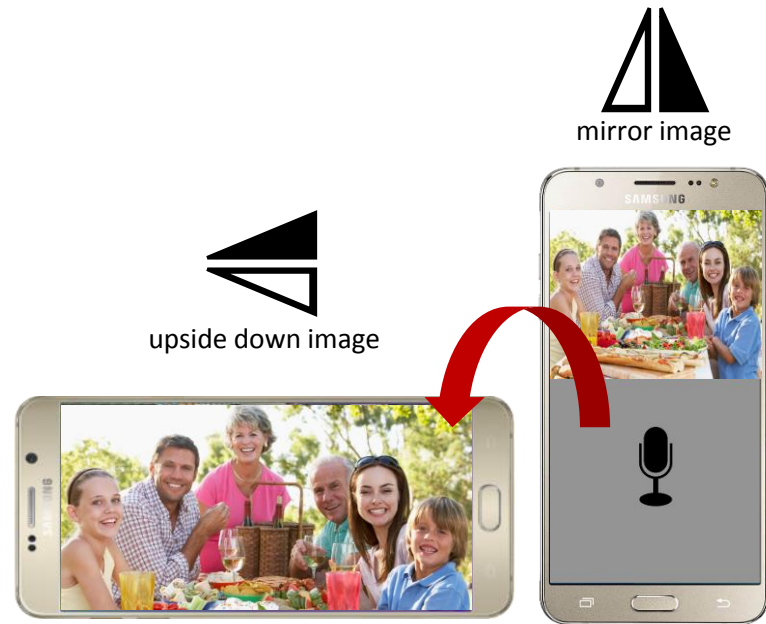


Enlarge the part that you want to see.

Can you not see clearly at the screen? Enlarge the part at Cube App.

You can see the part that you want to see in a bigger image.

When you have given the wrong change back at convenience store, when you wonder what your children is doing, zoom over 4 times through digital zoom panning function.



## Installing any direction

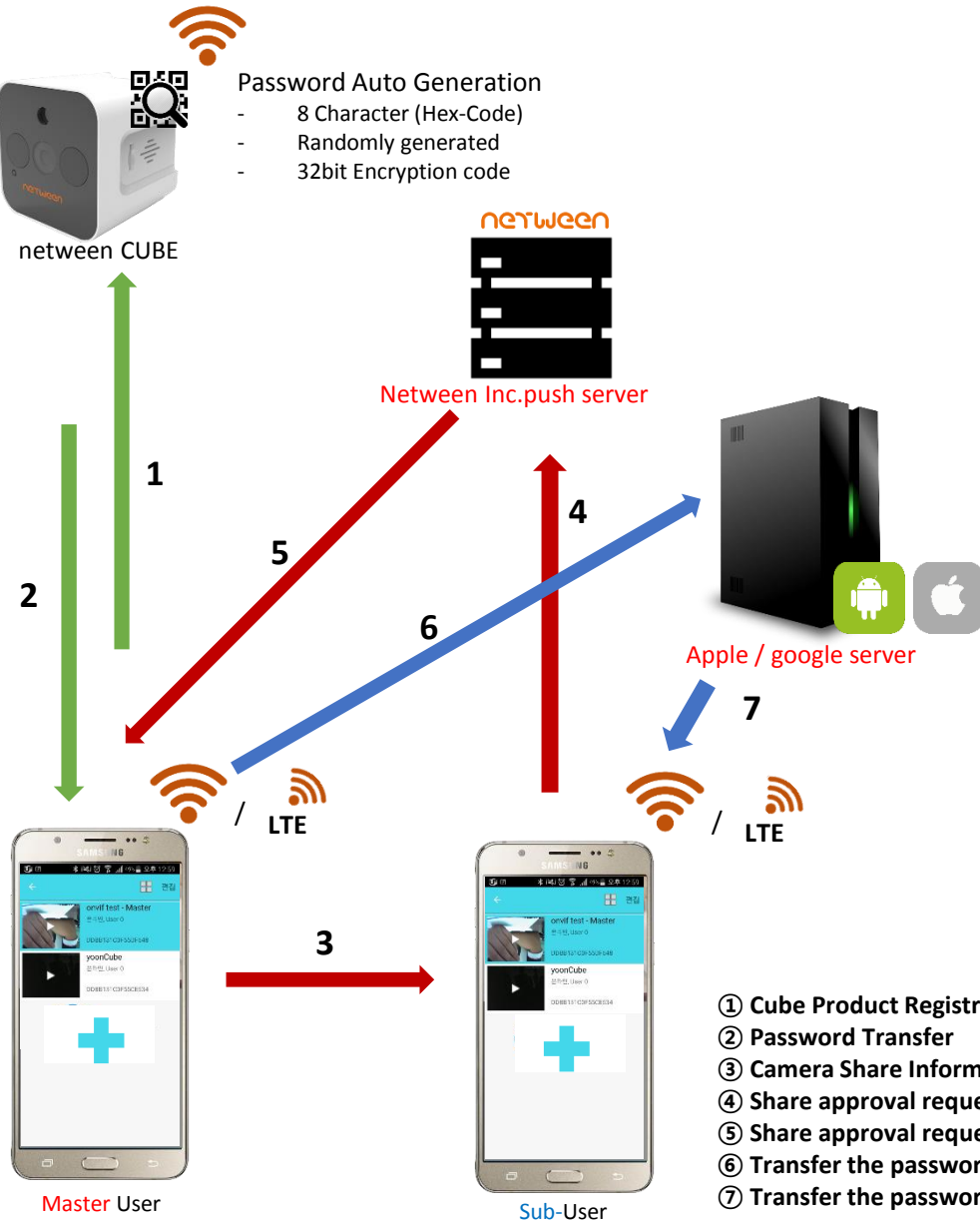
App has upside down function.

You can control the direction on the app.



IR –Array, ten times stronger than IR –LED

Large IR-ARRAY at both side of camera enhances night vision capability.



## Smart Security Certification System

As auto-generated passwords are produced from the device itself, you don't have to remember passwords. Also, Never available to back door or hack as nobody cannot know passwords.

- ① Cube Product Registration Request
- ② Password Transfer
- ③ Camera Share Information transfer through the SNS, SMS, Email...
- ④ Share approval request to Netween Push server.
- ⑤ Share approval request transfer to Master-user.
- ⑥ Transfer the password, ID, Name from the Master-User to the Server (Apple, Google)
- ⑦ Transfer the password, ID, Name from the server to the Sharer-User.



OnVIF

ONVIF



Recording on PC 24/7

You can connect NVR(network video recorder)



Difference

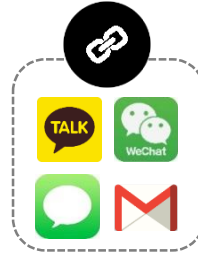
Easy install

# Available to view as ONE link



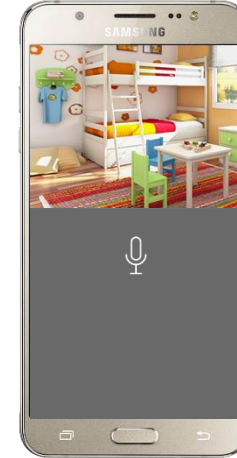
**STEP 1**

Create URL at Cube's app



**STEP 2**

Send URL to whatever messenger you wish



**STEP 3**

Register URL, watch



## Available to view as ONE link

Just send your URL.

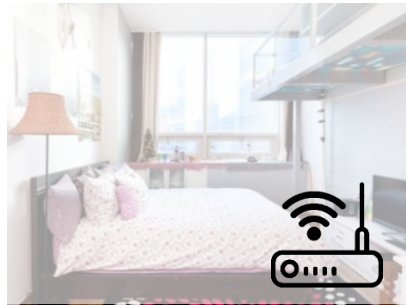
If you send URL through messenger app, text, mail, or any way you want, you can register cube through cube's app and monitor right away without special serial number and password.

Difference

Easy install

# Netween Cube works on any wireless internet.

## Wi-Fi automatic recognition up to 5 Wi-Fi router



On recognized Wi-Fi router, "Cube" will automatically connect

Once "Cube" has been connected to a router.

It will automatically connect.

(Supports up to 5 Wi-Fi router)





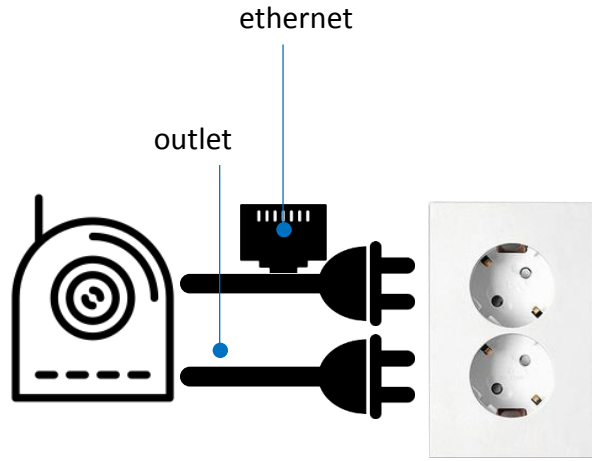


Difference

Easy install

# Plug & Play(P2P)

others



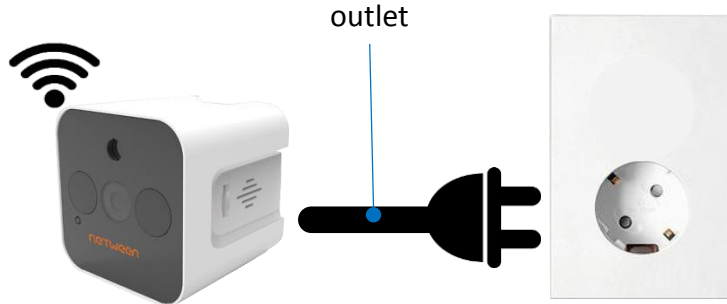
## Plug & Play

Don't need to connect wired internet.

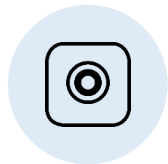
Wi-Fi is enough.

Between cube

wi-fi



Between  
cube



**STEP 1**

Install App



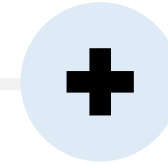
**STEP 2**

Recognize QR code of Cube



**STEP 3**

Connect WiFi



**STEP 4**

Finish registration



Install App with QR code: 1min

Installation of “Cube” app is simple.

QR code Recognition at either Google Play or Apple app store.

Easy install

Portable Size, Light weight



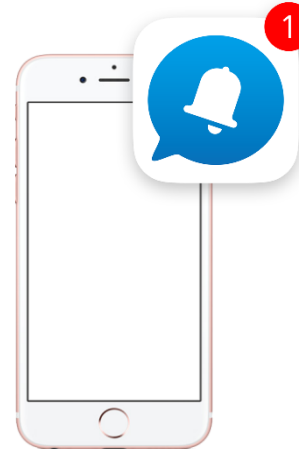
Weight that being able to take out

With its compact size and light weight, you can carry it with ease.

# Motion detection



Motion

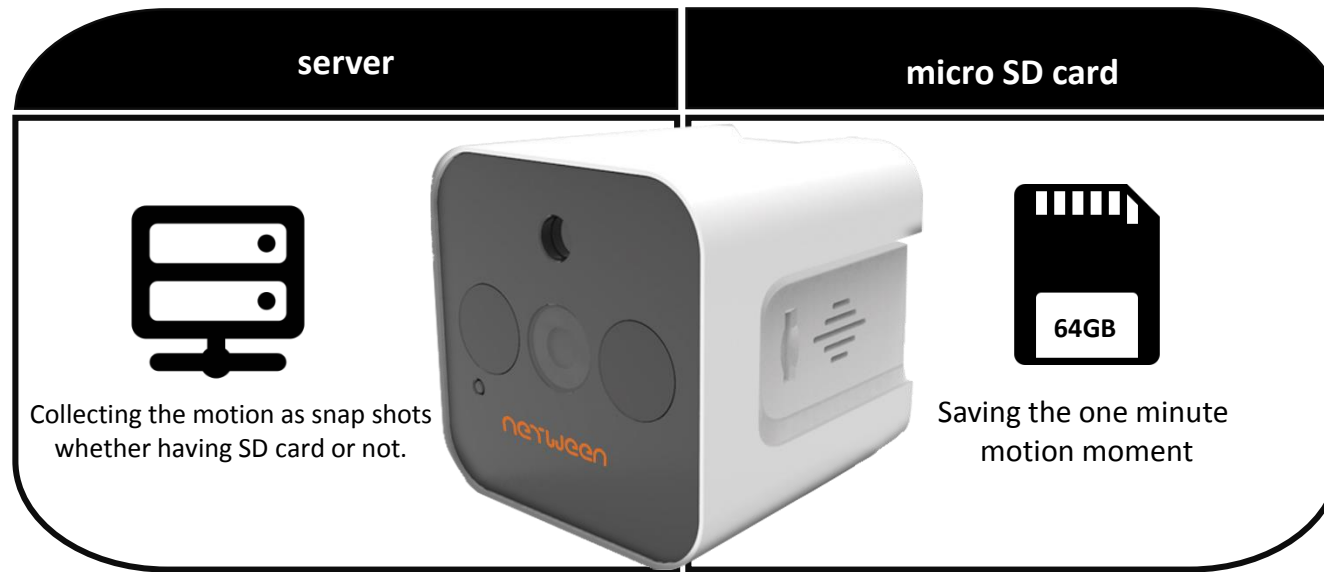


Sending the alarm message



Get the alarm message to your smartphone.

The motion alarm help you catch the motion on your smartphone.



## Recording the video on server and micro SD card

Catching the movement, SD card save the one minute motion.

Server collects all the motion as a snap shot whether having SD card or not.

You can check the snap shots on your smartphone.

(at least 14 days)

# A clear image



VGA  
640 x 480 p



HD  
1280 x 720 p



Full HD  
1920 x 1080 p



HD screen.

Netween cube has clear screen.

(HD and Full HD. if you ask to Full HD, we can change the chip.)

## Two-way communication



No!



MIC



Hi, mom!



### Speak and listen.

While watching the screen, touch the MIC icon. You can send your voice.

You can talk what you want to say to the elders, kids, and pet directly.



You can see more wider than before. 90° degree

Between cube can find the blind spot.



# Several Screen



## Check several cameras in one screen

You don't have to check one by one individually. Cube app allows you to simultaneously monitor up to four quad screen.



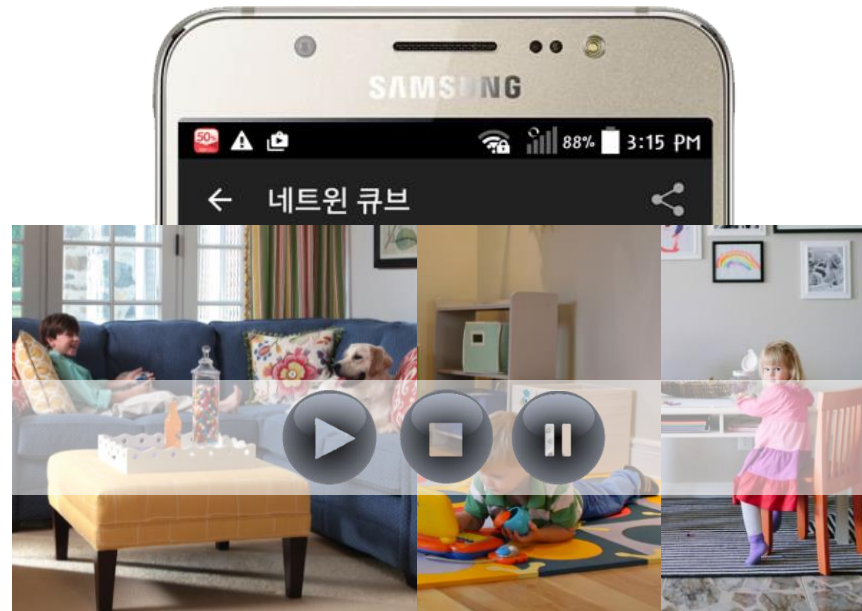
64GB SD card help your recording.

It is two times longer recording length than 32GB.

Even though the motions are detected on 24hours, 64GB SD card can record ten days at least.

(The less detection, the longer recording.)

# Watching video on the app (in development)



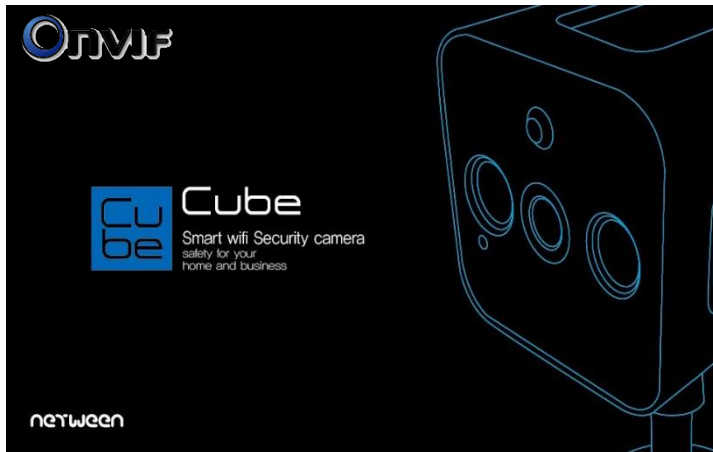
You can watch recording video on the app.

You don't need turn on a PC for watching video, and take off the micro SD card.

You can see all the recording video on your smartphone, app 'netween cube'.

# 04

## Product Evolution



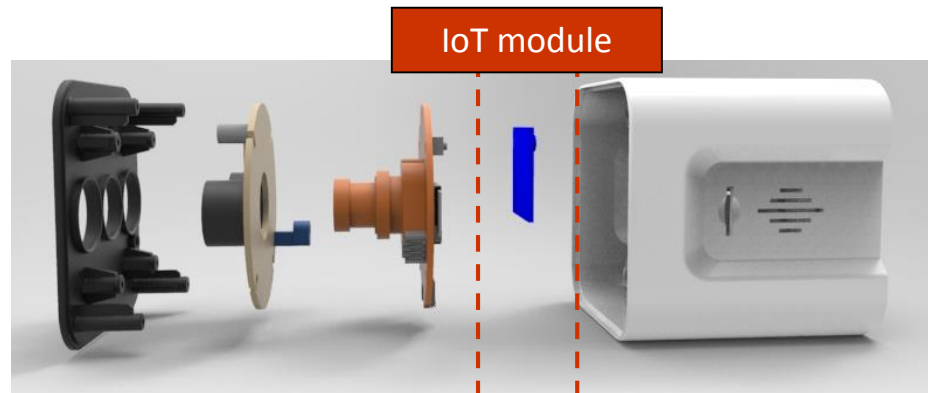
- Netween Cube + IoT GW
- Example of IoT cube
- Directions for Security Camera's improvement
- The way of saving motions
- Security Total solution full set
- New business model
- Silver care service

# Netween Cube + IoT GW



## Netween Inc. makes innovation

Netween Cube which is added IoT is an innovative product. Because of adding the IoT module, we make the enough space.



Seeing is believing.

Can you believe without seeing?

IoT is for controlling house at out side.

You can watch and control the house as your smart devices

# Example of IoT cube

## Smart Life with IoT CUBE

PC, Smartphone  
Alarm



internet



router



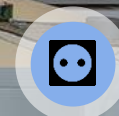
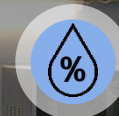
wifi



IoT  
CUBE



sensor



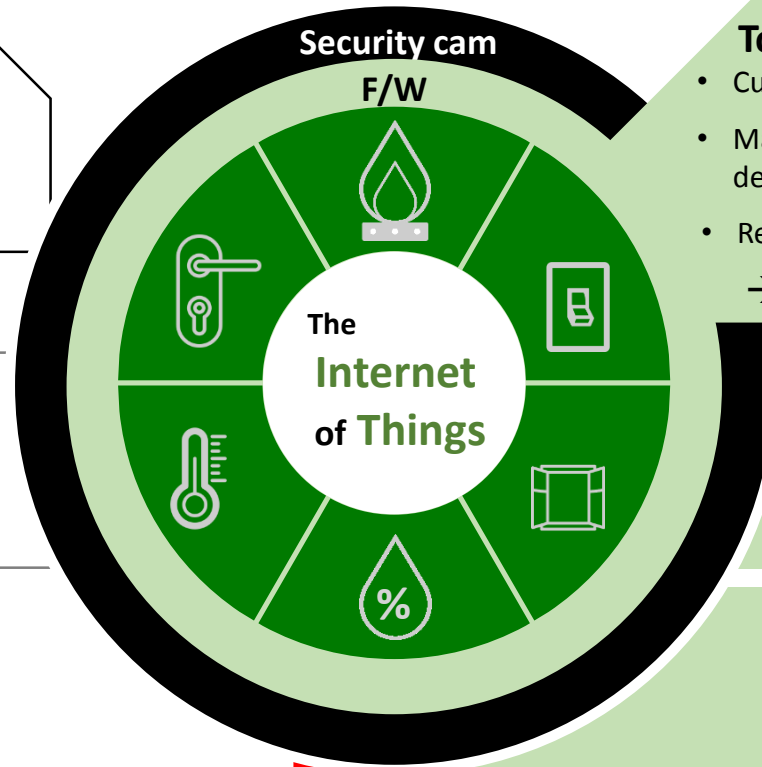
care



# Directions for Security Camera's improvement

## Technical side

## Market side



Only focus on specification's improvement

- meaningless competitive specification
- Each improvement of app, server, cam

### Total solution for User

- Customer needs
  - Making server, cam and app all in one development
  - Related to IoT
- Reasonable price and function



Cam

- H.264
- Entering and transferring a P/W
- Motion detection
- Video and voice synthesis
- VGA, HD, Full HD, UHD.....



Cam

- H.264
- Making P/W automatically
- On VIF 2.1 and NVR connection
- Motion detection
- HD



Server

- p2p tunneling
- Push alarm transmission
- Video relay
- Managing and Integrating Clouds



Server

- p2p tunneling
- Push alarm transmission
- Video relay



App

- IoT linking and controlling
- Image Coding Scheme Decoding



App

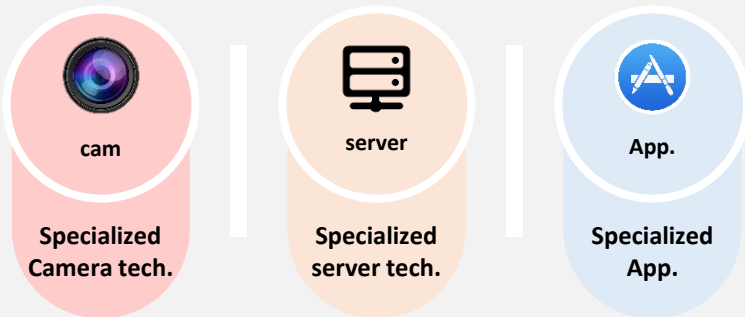
- Sharing video on SNS
- Time limited Live streaming
- Controlling IoT
- Image Coding Scheme Decoding
- Sharing LIVE video

Technique picking up and development

## Security Cam Companies

A company for  
technique's improvement

Each part technique



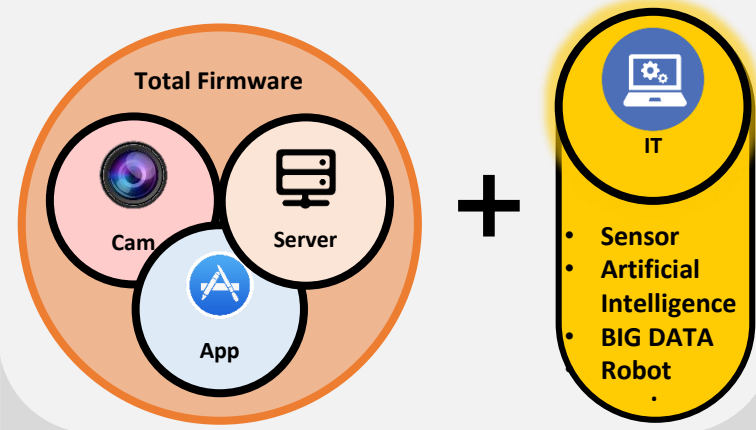
Concentrating on  
new developed technique realization .

Key point is  
function from new technique, produce, and solution.

## NETween

A company for  
customers needs

Convergence each technique and  
building Netween Inc.'s own platform for IoT.



Concentrating on applied technique and  
applying to daily life.

**CONVERGENCE**

Key point is  
making and meeting customer needs.



# Saving Motion

## Basic

### SNAP SHOT



Detecting a motion, it is automatically recorded time and picture in a netween server.

### Server



## Deluxe

### Recording



Detecting a motion, the motion is recorded on SD card in one minute.

\*Netween., Inc doesn't sale a SD card.

### SD card



## Premier

Recording video 24/7



### NVR



Being able to recording every moment.

\*SET product with netween cube, cube iron.

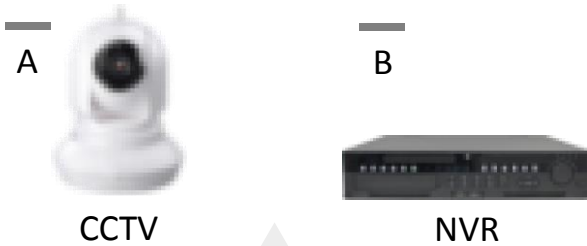
# Total solution full set



The reason why netween cube could be popular!

Netween Inc. can customize for users.

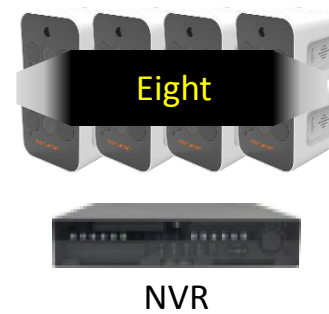
Price is half than the others. You can install IP cam more than two times.



developing at two different companies



developing at the same company



amount  x2

price  x1/2

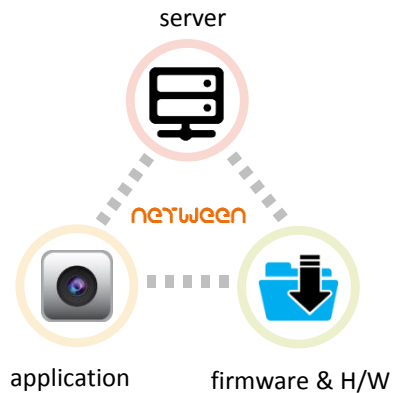
# New Business Model

1

## Product Sales

### total solution

- Netween Inc. develop server, app, firmware, hardware
- Connecting with the personnel security camera.

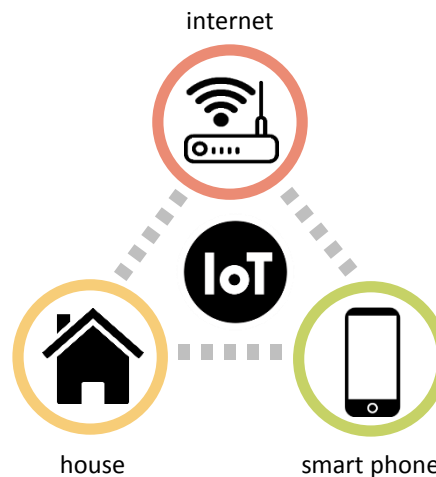


2

## Convergence Product

### Security Camera with IoT

- IoT CUBE  
Personnel security camera with IoT
- Controlling the house at out side.

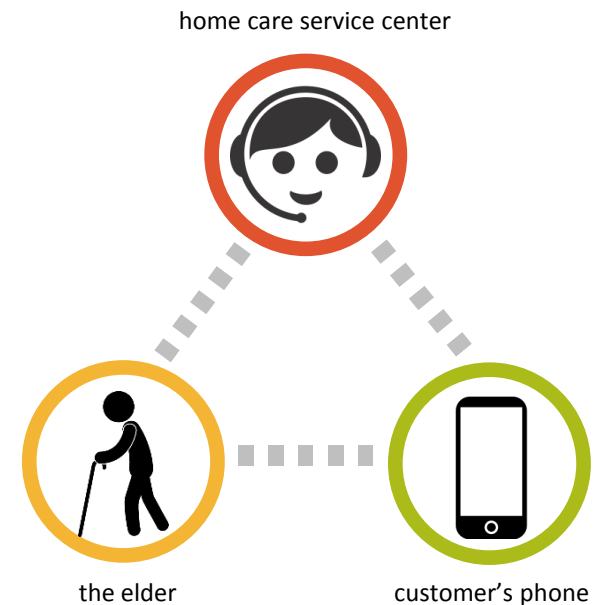


3

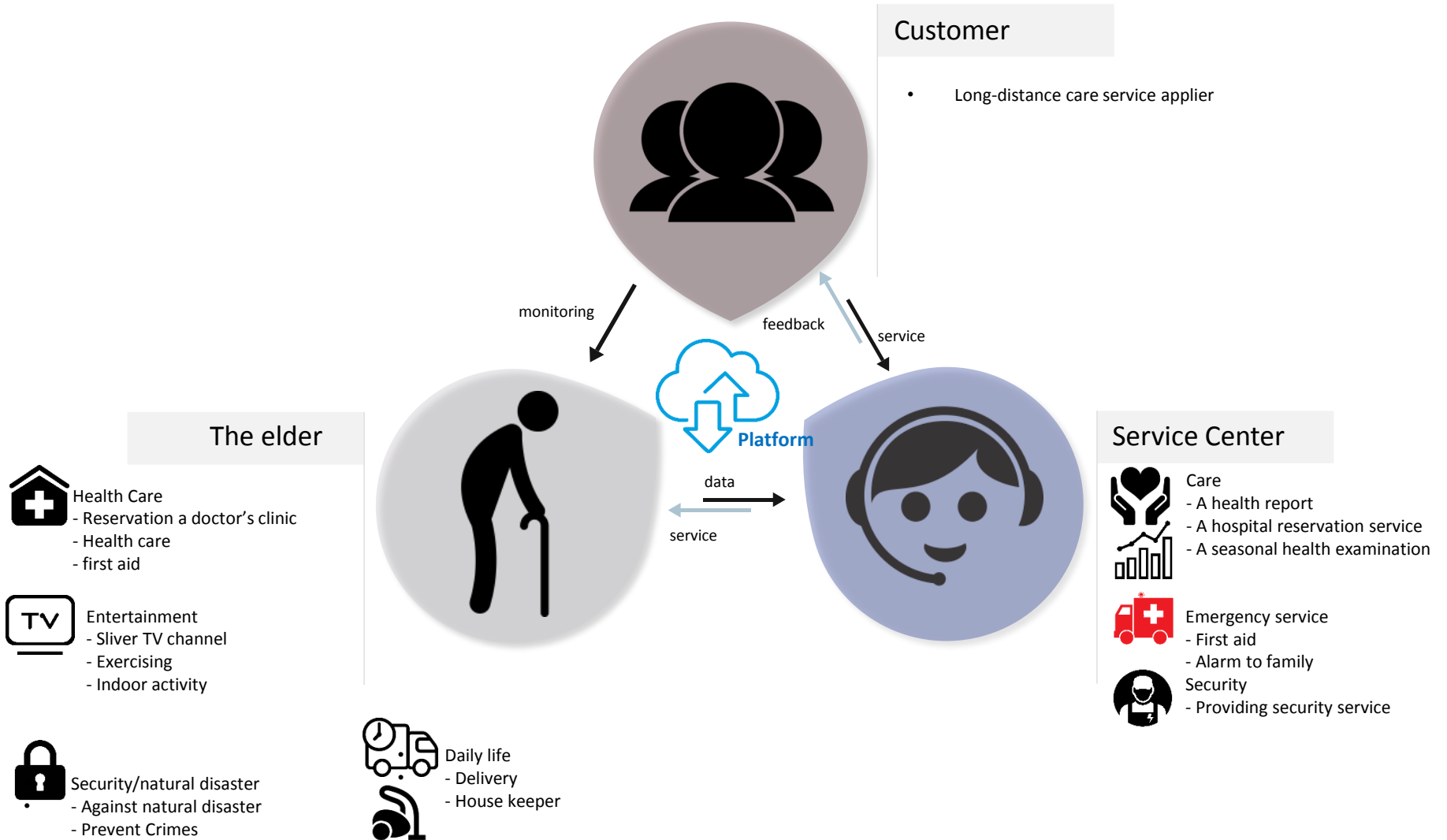
## Service Sales

### sliver care

- Connecting IoT with homecare service.



# Sliver Care service





# Appendix

- Violent crimes on rise and effectiveness of security camera
- Products included in package
- SPECIFICATION

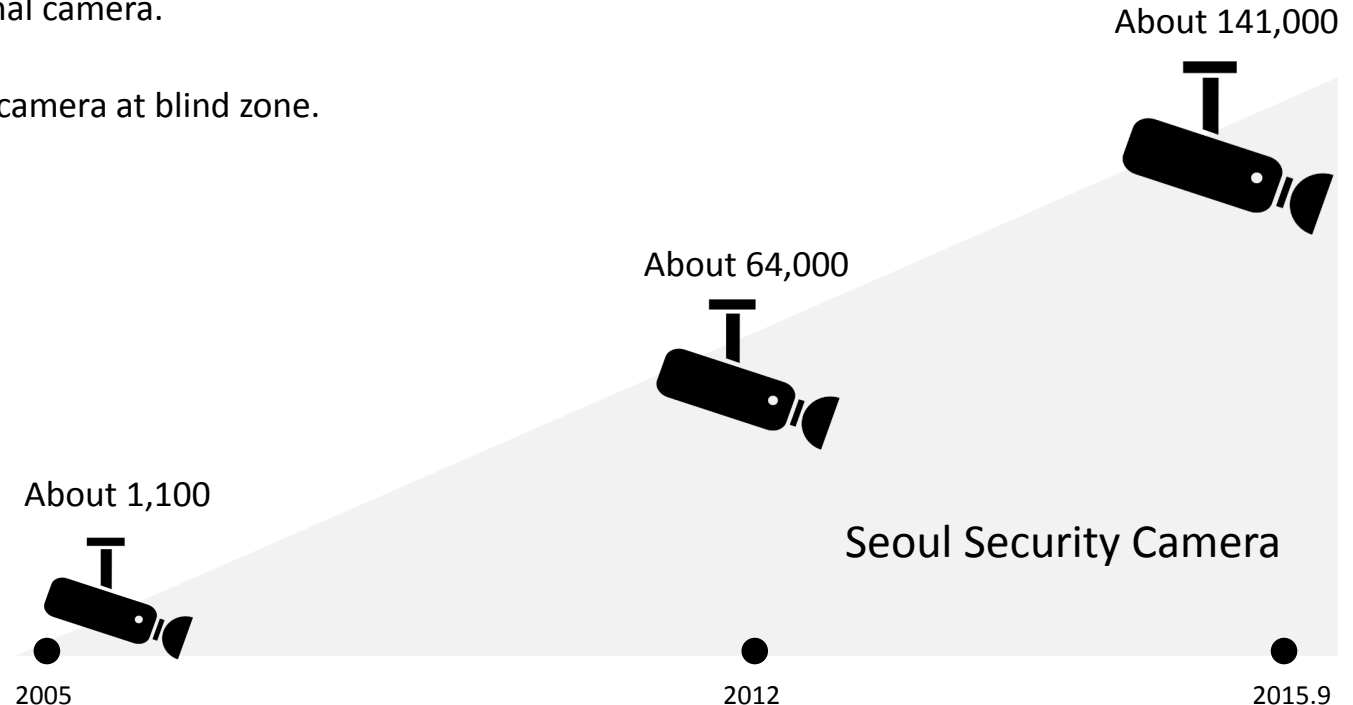
# Violent crimes on rise and effectiveness of security camera

As violent crimes increase, more security camera are installed in public spaces.

Just Installation of security cameras at many towns prove the crime prevention.

These news titles say how effective a security camera installation is.

- Adoption of CSI and 3 fold increase of security camera at Busan. Violent crime down, arrest rate up.
- Secho-gu established Female Security Zone installed \$75,000 worth of surveillance camera.
- Gangnam-gu installed 82 additional camera.
- Yeosu-si, installed 106 additional camera at blind zone.



# Products included in package

## Basic package



**Main product**



**stand**



**3m cable**



**screws**



**adopter**



**Quick install guide**

# SPECIFICATION



## Specification

### Camera

- Resolution : HD 1280 x 720
- Pixels : 1 Mega Pixels
- Format : H.264
- View Angle : 90°
- Night vision : IR-ARRAY LED
- Auto Exposer
- Auto White balance

### Network

- Wi-Fi : IEEE802.11n Standard
- Data Rate : 150Mbps
- Compatible OS : IOS, Android
- Video stream : RTSP

### Main Features

- Motion Detection / Push Alarm
- Micro-SD Slot (Max 64GB)
- Two way Voice : MIC & Speaker



# Thank You

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Presentation by Netween Inc.

[www.netween.co.kr](http://www.netween.co.kr)

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