



*UTP POWER SUPPLY UNIT*

**SC-UPS01**  
**SC-UPD08**

## User's Manual

**SC-UPS01**



**SC-UPD08**



## Precaution and Safety Guidelines

Thank you for purchasing our product.

Please read this manual carefully and fully understand the portions of the installation and operation instructions prior to installing and using the product.

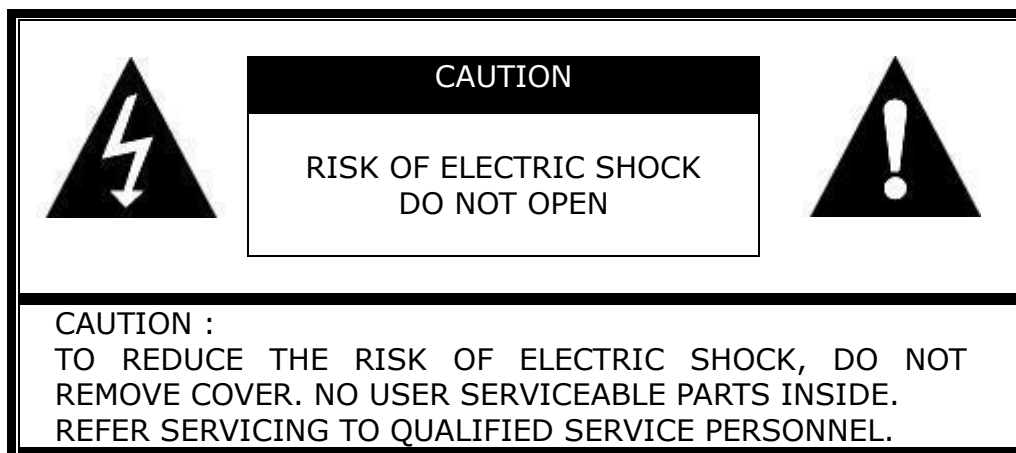
Should you have any part of them not understandable or if you have any problem during your installation or in using it, please contact us.

Reproduction of this instruction or any part thereof without permission is strictly prohibited.

You must read the precautions required for safe operation prior to using it and operate it correctly.

Please understand that the contents of this operating instruction may differ slightly due to functional improvement of a product and based on the specification chosen by the user.

You can use this product easier and more conveniently if you use the function of the product only after reading this operating instruction carefully.



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

※ **WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.**

## 1. Introduction

### 1.1. Overview

The SC-UPD08 is a power supply unit over UTP cable. It supplies power up to 8 cameras connected with the SC-UPS01 device or via the SC-UT0124MD transmitter. It transmits video signals through cable link to the DVR by UTP cable. Also, it provides the RS-485 port for data communication.

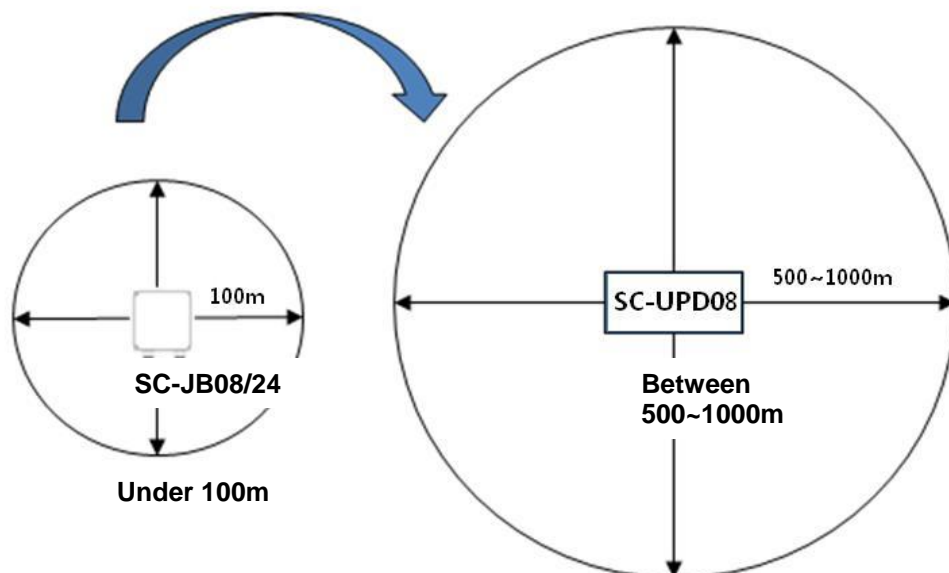
It is able to supply power to the camera up to 1000m. The power supply distance may vary depending on the cable loop resistance and the camera's power consumption.

### 1.2. Features

- Power supply up to 1km via CAT.5 UTP cable(for cameras with 2.5 Watt)
- Easy installation of power supply as it supplies power to long distance
- Reducing infrastructure cost when installing UTP cameras
- Auto control of power supply by monitoring the UTP cable
- Possible to hanging on the wall or installing to a 19" rack.
- Data port for camera PTZ control
- Surge protection function

### 1.3. Applications

- Where UTP video transmission solutions are installed.
- Where the distance between the camera and the DVR is less than 1000m.
- While using the JB08/24, you can supply power to the camera from 100m away, with the SC-UPD08, you can supply power max. from 1000m away.



## 1.4. Components

Please find the below components in your package.

**SC-UPD08**

**Mount Bracket**

**User's Manual**



## 2. Product External Parts & Peripheral Devices

### 2.1. Name of Part and Functions

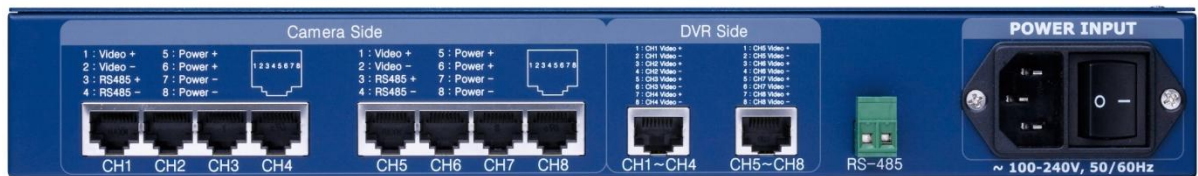
#### Front side



① LED indicators per channel

- **Green:** It indicates that the SC-UPS01 or SC-UT0124MD is connected and the power is supplied.
- **Red:** It indicates that the SC-UPS01 or SC-UT0124MD is not connected yet and the power is ready to be supplied.

#### Rear side



① Connection of UTP cable at camera side

② DVR side

③ RS-485

④ ON/OFF SW

- ① UTP cable connection at camera side: It links the video and supplies power to the camera.
- ② DVR: It transmits 8 video signals to the DVR.
- ③ RS-485: Connect RS-485 DATA communication port.
- ④ ON/OFF SW: Turn on/off for power.

※ **Notes:**

This product recognizes automatically the SC-UPS01 and/or the SC-UT0124MD for safety power supply. So, it does not supply power when connecting other UTP devices besides the SC-UPS01 and/or SC-UT0124MD. When connecting other devices besides the SC-UPS01 and/or SC-UT0124MD, a 48VDC electric power source may be supplied due to wrong recognition and it may damage the product.

– Available power supply devices are as follows:

UTP power supply unit: SC-UPS01

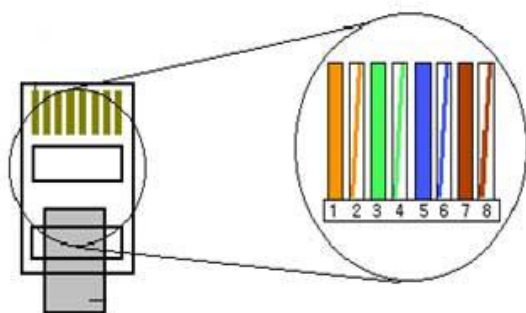
UTP video transmitter: SC-UT0124MD

Samsung Techwin UTP transmitter built-in cameras: SDC-425U, SID-460U, SID-47U, SID-53AU, SHC-735AU

## 2.2. How to connect the UTP cable

### 2.2.1. UTP connection at camera side

- Insert the RJ-45 plug to the UTP cable connection port at camera side.
- Then, connect the UTP cable lines according to the below table.



No.	Camera	DVR
1	VIDEO (+)	CAMERA 1 (+)
2	VIDEO (-)	CAMERA 1 (-)
3	RS-485 (+)	CAMERA 2 (+)
4	RS-485 (-)	CAMERA 2 (-)
5	CAM POWER (+)	CAMERA 3 (+)
6	CAM POWER (+)	CAMERA 4 (-)
7	CAM POWER (-)	CAMERA 4 (+)
8	CAM POWER (-)	CAMERA 4 (-)

※ **Notes:**

- Insert the RJ-45 plug to the Ch 1 to Ch 8 port of the SC-UPD08
- When you wish to transmit the data, connect the RS-485 DATA connection lines according to the polarity.
- Please note that the UTP connection is different from ordinary Ethernet connection.

### 2.2.2. UTP connection at DVR side

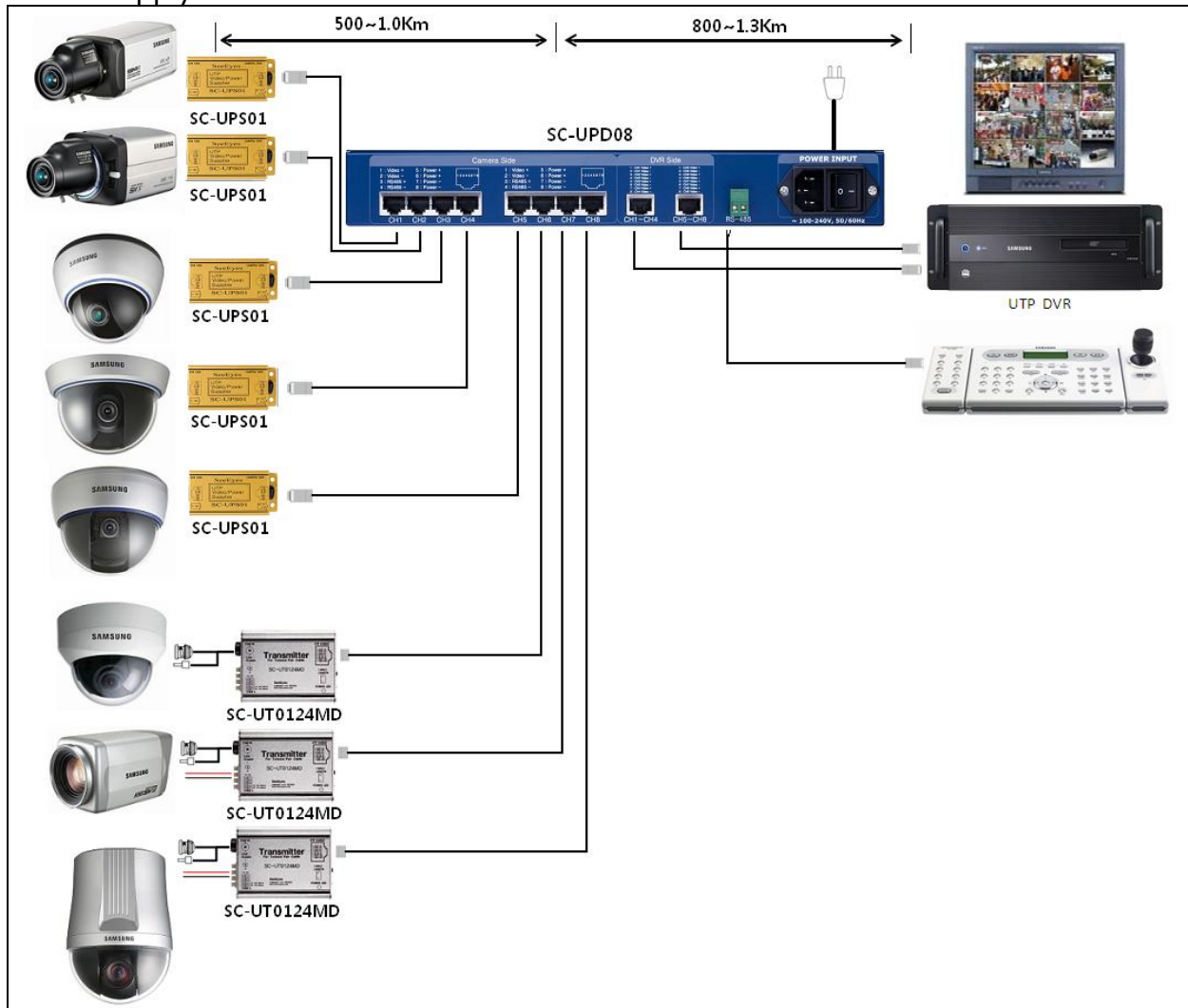
- Insert the RJ-45 plug to the UTP cable connection port of the DVR.
- Then, insert the RJ-45 plug to the UTP connection port of DVR side of the SC-UPD08.
- Connect the power plug (AC) to the AC power input terminal block of the SC-UPD08.
- Turn on the power switch when all the devices are connected correctly. The LED indicators will turn on Red and change to Green in consecutive order, and then the camera will operate.

■ **If the LED maintains in RED,**

- Check the SC-UPS01 and/or the SC-UT0124MD is connected correctly.
- Check the UTP cable is opened or shorted.
- Check whether the DVR receives the video signals or not.
- Please note that the UTP connection is different from ordinary Ethernet connection.

### 2.3. Connection Diagram

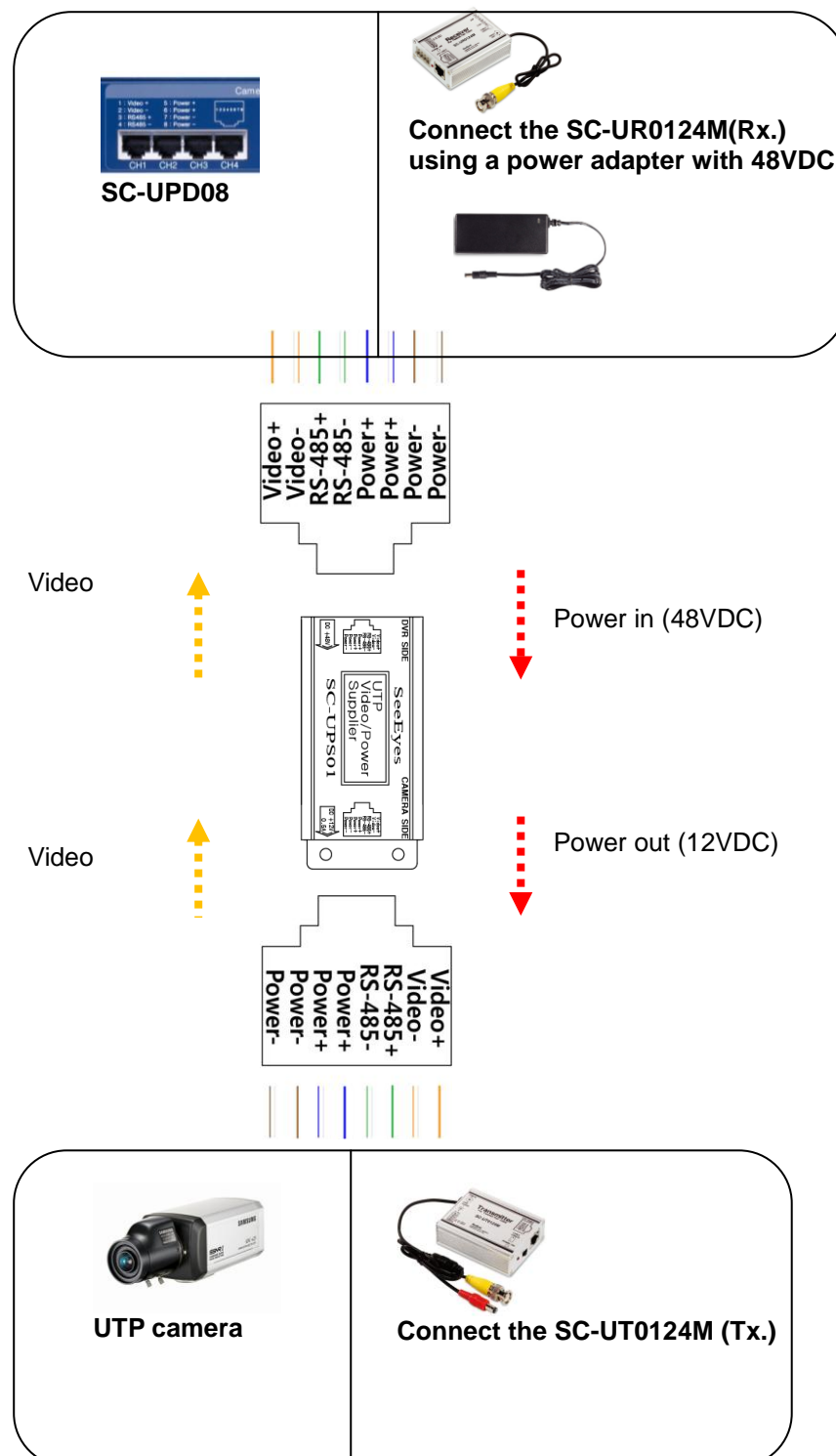
Please refer to the below connection diagram when connecting the SC-UPD08 with the SC-UT0124MD transmitter and/or SC-UPS01 power supply unit.



- When use UTP camera and want to supply power by SC-UPD08, use the SC-UPS01.
- When use ordinary camera with coaxial connector and want to transmit video and supply power via UTP cable, use SC-UT0124MD.
- The video transmission distance between the camera and the DVR may differ depending on the UTP cable status and the CCTV installation environment. By using Samsung Techwin UTP cameras such as SHC-735AU, SDC-425U, SID-460U, SID-47U and SID-53AU, you can transmit video up to 1.8km maximum.

## 2.4. Installation

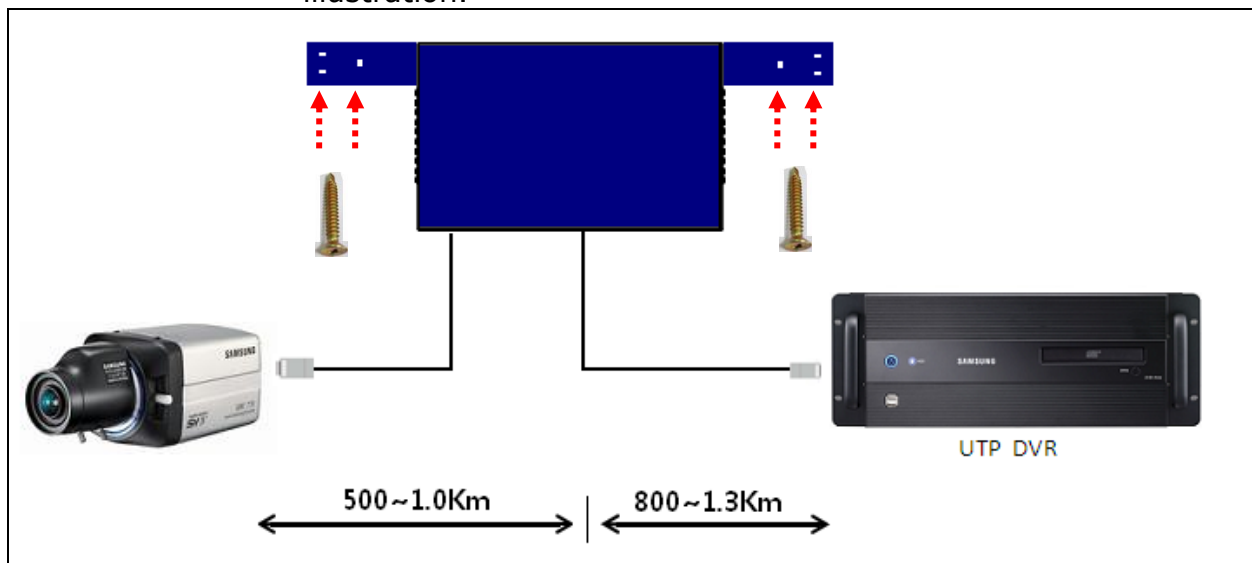
### 2.4.1. How to connect the SC-UPS01 and the SC-UT0124M



- The SC-UPS01, the DC/DC down-converter, converts the power of 48VDC down to a 12VDC. To supply power to the camera, it should use together with the SC-UPD08 and the SC-UR0124M or SC-UR1615M as a receiver.

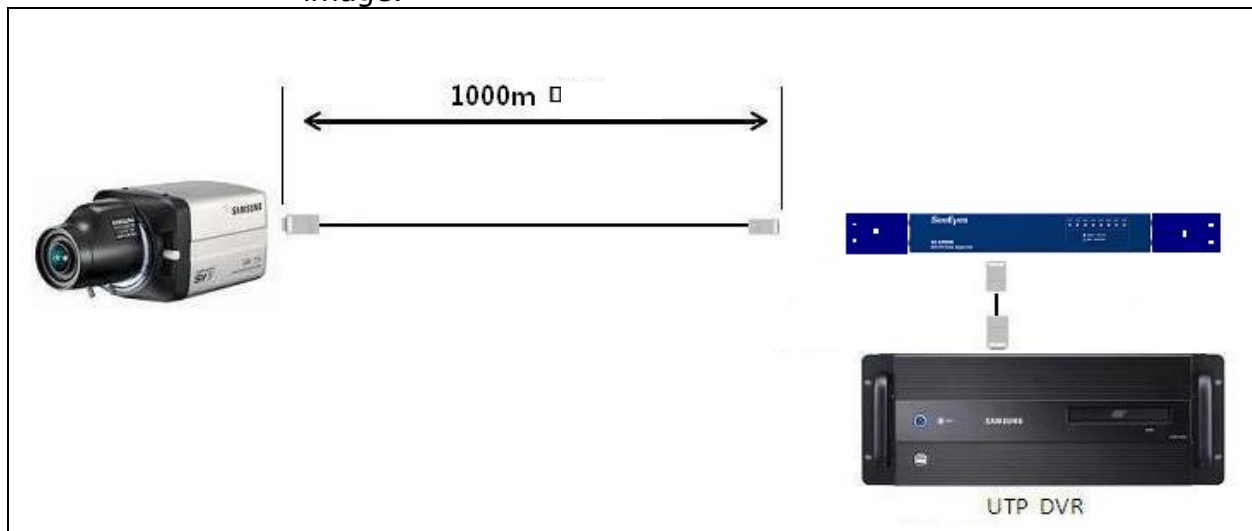
### 2.4.2. How to install the SC-UPD08

- **When mount against the wall**, please refer to the below illustration.



- When installing the SC-UPD08 between the camera and the DVR, please mount the unit against the wall by the screw.
- Mount the device on the wall using the mount bracket enclosed and facing the bottom and fix it with the screw as above picture.

- **When installing it at a 19" rack**, please refer to the below image.



- You can install the SC-UPD08 separately or at a 19" rack together with the DVR as above.
- Mount the device at the rack using the mount bracket enclosed and facing front side and then fix it with rack bolt as above picture.



### 3. Specifications

MODEL		SC-UPD08
Video IN		51Ω 1Vp-p ~ 2.5Vp-p
Video OUT		51Ω 1Vp-p ~ 2.5Vp-p
POWER	INPUT	AC 100~240V 50/60Hz
	OUTPUT	DC 48V/125mA (MAX) per channel
	On/Off	Auto control per each channel
Max. Distance (CAT. 5)	Camera powr	1 km
	Video signal	Only for cable link
Connect Port	Video IN	8 Port (RJ-45)
	Video OUT	2 Port (RJ-45)
	DATA	2 Pin Terminal Block
Temperature / Humidity		-15℃ ~ +40℃ / 0 ~ 80%
Case body / Weight		Steel / 2 kg
Dimension (mm)		310(W) × 44(H) × 190(D)

MODEL		SC-UPS01
Video IN		51Ω 1Vp-p ~ 2.5Vp-p
Video OUT		CVBS 1.0Vp-p, 75Ω
Power Input		DC 48V
Power consumption		≒ 180mA(DC 12V)
Connect Port	Video IN	RJ-45
	Video OUT	RJ-45
Temperature / Humidity		-10℃ ~ +50℃ / 0 ~ 80%
Case body / Weight		Aluminum / 230 g
Dimension (mm)		81(W) × 42(H) × 24(D)

## **4. Precautions and Safety Guidelines**

### **4.1. Precautions on Use**

- Please turn the power OFF prior to installation of the device.
- Do not install or use the device in a humid, hot or hazardous explosive environment without suitable or adequate protection.
- Do not expose the device to magnetic materials, high frequency radio waves.
- Avoid exposing the device to direct sunlight or into an unstable environment.
- Do not drop the product or subject it to shock.
- Do not modify or disassemble the product.
- Should be careful not to have the RJ-45 lines changed when connecting them. If you connect the UTP lines as the normal Ethernet way, it may cause crosstalk or noise in the video. Please refer to the page 4 on how to connect the UTP cable.
- Please refer to the LED indicators when the device is not working properly.
- The installation should be made by a qualified service person and should conform to all local codes.
- If there is any malfunction in the device, please contact your distributor immediately.

## 5. Warranty Certificate

This product has passed thorough quality control and test, and if this gets broken during normal use, we provide 12 months warranty service.

<b>Model No.</b>		
<b>Serial No.</b>		
<b>Distributor</b>		
<b>Date you purchased</b>		
<b>Place you purchased</b>		
<b>Warranty Period</b>		One (1) year from the date of purchase
<b>Purchaser</b>	<b>Name</b>	
	<b>Address</b>	

- Please check this warranty indication first.
- Please contact your distributor after checking out any defect in the products.
- The standard for repairing, replacement or reimbursement follows Customer.
- Warranty content any defect under normal use within the warranty service period we give you free repair service according to the warranty certificate.
- We charge you with the fee of parts and service despite of free warranty service period. Any breakage made without care such as:
  - Breakage or trouble made by natural disaster.
  - Breakage or trouble made by breaking the product guide or manual.
  - Breakage or trouble made by wrong power voltage or frequency.
  - When you want to reassemble for full system or replace parts within warranty service period.
  - When unauthorized person modified or made damage on the product trying to repair it.
- Please note that we don't support the breakage after warranty service period is expired. If the customer wants to get it repaired, we charge them with the fee.
- The specification is subject to change without prior notice for quality improvement.

 **SeeEyes Co.,Ltd** is the New Corporate Name of Samsung CCTV Service Co.,Ltd



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