

# Cameras HD 1080P

**4 in 1**  
**HD-TVI / AHD / HD-CVI / CVBS**

## **User Manual**

TBK-MD5541IR, TBK-MD5542EIR,  
TBK-MD5543EIR, TBK-MD5741EIR, TBK-MD5742EIR,  
TBK-BUL4541EIR, TBK-BUL4741EIR



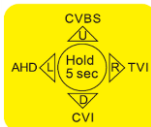
# 1 Product description

## 1.1 Product Introduction

This manual is applicable to following models:

TBK-MD5541IR, TBK-MD5542EIR, TBK-MD5543EIR,  
TBK-MD5741EIR, TBK-MD5742EIR, TBK-BUL4541EIR,  
TBK-BUL4741EIR.

This series of cameras use 2MP sensor, support TVI/AHD/CVI 1080P and CVBS video signal output selectable. These cameras are adjusted with TVI output by default, please select other video signal through menu cable switch.



In order to switch from one video output to another hold down the option 5 seconds at least.

The same video technology between camera and DVR must be used.

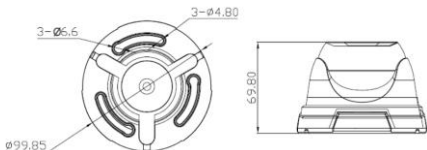
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## **1.2 Product Features**

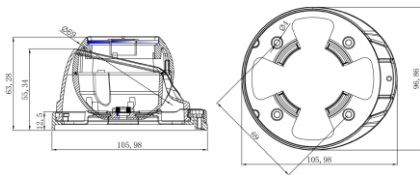
- Use AR0237 high performance image processing chips.
- Resolution 1920\*1080.
- Support HD TVI, AHD, HD-CVI or CVBS video output, no delay, lossless, long distance transmission up to 500m.
- Double filter IR-CUT switch, good sharpness, lower noise.
- Support basic OSD function.

## 2 Product Structure

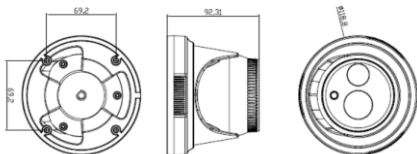
The followings are the dimensions of some products. No further notice for the upgraded version.



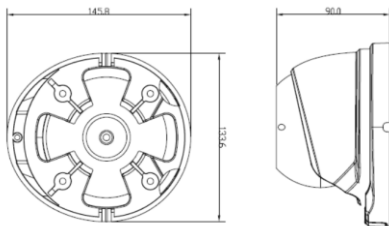
Model TBK-MD5541IR



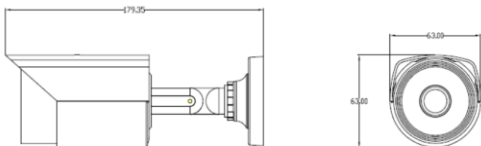
Model TBK-MD5542EIR



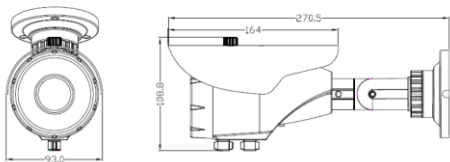
Model TBK-MD5543EIR



Model TBK-MD5741EIR y TBK-MD5742EIR



Model TBK-BUL4541EIR



Model TBK-BUL4741EIR

### 3 Technical Parameters

<b>Image Sensor</b>	1/2,7" color CMOS (1080P/2MP)
<b>Format</b>	PAL/NTSC
<b>Resolution</b>	TVI / CVI /AHD: 1920 x 1080P CVBS: 650 / 700 LTV
<b>Min. Illumination</b>	0.1 lux F1.2 (0 lux with IR LED ON)
<b>Video Output</b>	Switchable (no simultaneous): HD 1080P:TVI/ AHD/ CVI or CVBS
<b>Frame rate</b>	30fps (60Hz) 25fps (50Hz)
<b>D&amp;N</b>	Support ICR
<b>SNR</b>	>52dB (AGC off)
<b>Electronic shutter</b>	1/50(60)s~1/100.000s
<b>Other</b>	Menu OSD: AGC, WB, BLC Auto.

<b>IP Protection</b>	TBK-MD5541: Indoor.  TBK-MD5542_5543_5741_5742EIR/  TBK-BUL4542_4741EIR: IP65.		
<b>Working enviroment</b>	-20°C ~ +50°C, 10% ~ 90% humidity		
<b>Power</b>	12VDC $\pm$ 10%. It is recommended to use  12VDC 2A power supply.		
	<b>Consump.</b>	<b>Weight</b>	<b>Dimesions mm</b>
TBK-MD5541IR	665 mA	250 g	H70 x Ø100
TBK-MD5542EIR	800 mA	460 g	H64 x Ø97
TBK-MD5543EIR	665 mA	510 g	H93 x Ø119
TBK-MD5741EIR	815 mA	840 g	H90 x Ø146
TBK-MD5742EIR	800 mA	830 g	H90 x Ø146
TBK-BUL4541EIR	800 mA	450 g	L180 x Ø63
TBK-BUL4741EIR	900 mA	910 g	L271 x Ø93



## 1080P HD Camera Series

	<b>Lens</b>	<b>LEDS IR</b>	<b>LEDS range</b>
TBK-MD5541IR	3.6 mm	24	20 m
TBK-MD5542EIR	2.8 mm	36	25 m
TBK-MD5543EIR	3.6 mm	1 Array	25 m
TBK-MD5741EIR	2.8-12mm	36	25 m
TBK-MD5742EIR	2.8-12mm	3 Array	30 m
TBK-BUL4541EIR	3.6 mm	18 Piranha	25 m
TBK-BUL4741EIR	2.8-12mm	42	30 m

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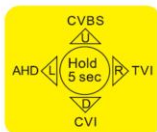
## **4 Product Installation**

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1. Avoid installing the camera directly towards the sun.
2. Do not install it in the place where temperature is above 50°C or below -20°C.
3. No installation in the areas with frequent vibration.
4. Avoid operating and storing in the water.
5. Video cable connector and DC tie-in must be avoided touching water.
6. Please ensure that power input is right.

## 5 Configuration

These cameras are adjusted with TVI video output by default, please select other video signal through menu cable switch.



In order to switch from one video output to another other hold down the option 5 seconds at least.

The same video technology between camera and DVR must be used.

TVI	1080P HD-TVI video signal (by default)
CVI	1080P HD-CVI video signal
AHD	1080P AHD video signal
CVBS	650/700LTV analogue video signal

Menú OSD with the following basic adjustments:

- AE, options:
  - BRIGHTNESS: value 1~20
  - EXPOSURE MODE: modes GLOBE/ CENTER/ BLC/ FLC
  - GAIN: value 1~8
- B/W: modes ATW/MWB
- DAY/NIGHT: modes COLOR, B/W, EXT
- VIDEO SETTING: CONTRAST, SHARPNESS, COLOR GAIN, DNR (1~15), FORMAT (PAL/NTSC).

## 6 Troubleshooting

No.	Problem	Reason	How to solve
1	Image normal in the day while vague or being interfered by horizontal stripes at night.	Power is not enough or power cable is too long.	Change power supply or shorten power cable.
2	No image	The camera has different video standard than recorder	Choose appropriate video standard on camera accordingly to recorder
		Wrong connection to the video cable.	Reconnect
		Power gets problem.	Change power supply.
		Having not connected to power supply.	Plug in.

TBK VISION

[www.tbkvision.com](http://www.tbkvision.com)