



## APPENDIX G

### : USER'S MANUAL

**Vision Camera**

**U-Han Presen Presenmarker**

User Manual



# 1. Specification

## 1.1. General Feature

- PC Interface USB 2.0 (480Mbps) [USB 2.0 Compatible]
- Sensor video data format 8bit YUV

## 1.2. PC Requirements

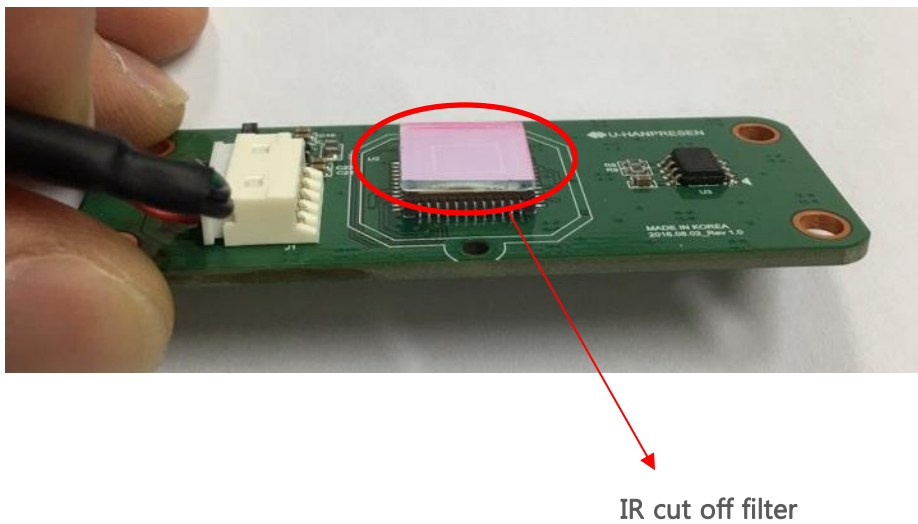
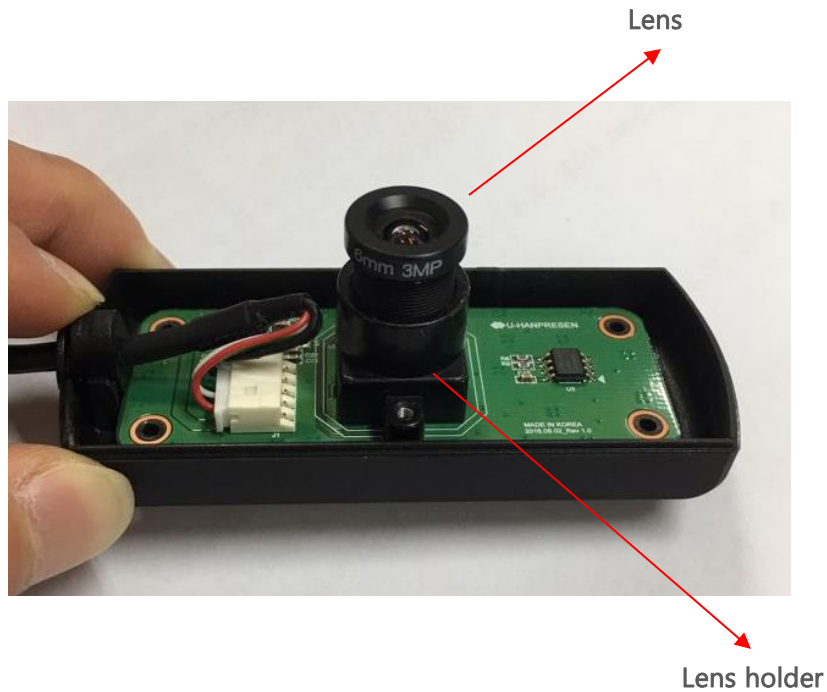
- CPU Pentium4 3.0GHz or more
- RAM 4GB or more
- Operating System Windows XP SP2, Windows 7

## 1.3. Package

- Presenmarker



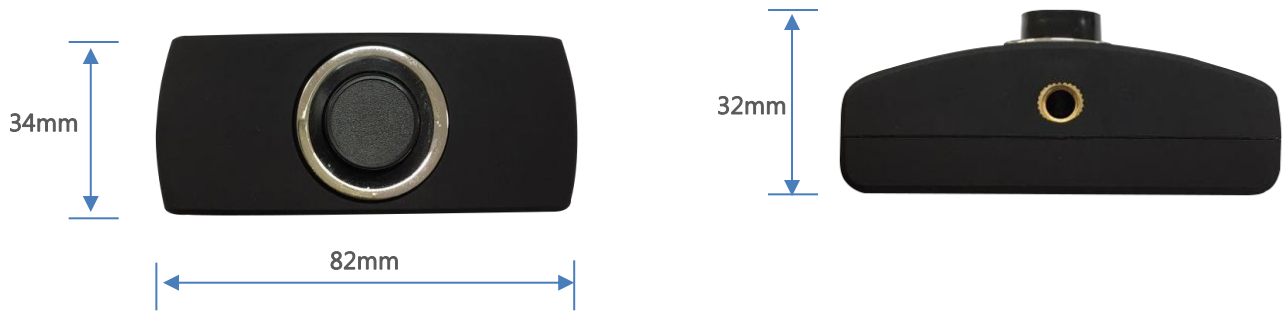
### 1.4. Inside composition



IRCF 16\*16 0.55T T50% = 650+/- 10nm

### 1.5. Dimension

Camera Body Size : 82(w) x 34(h) x 32(D) mm

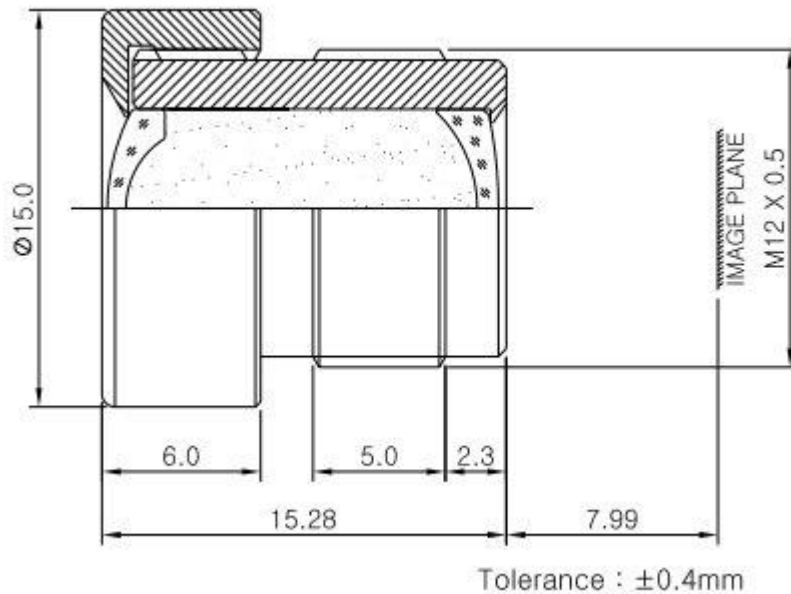


<U-Han presen - Presenmarker>

### 1.6. Camera Interface



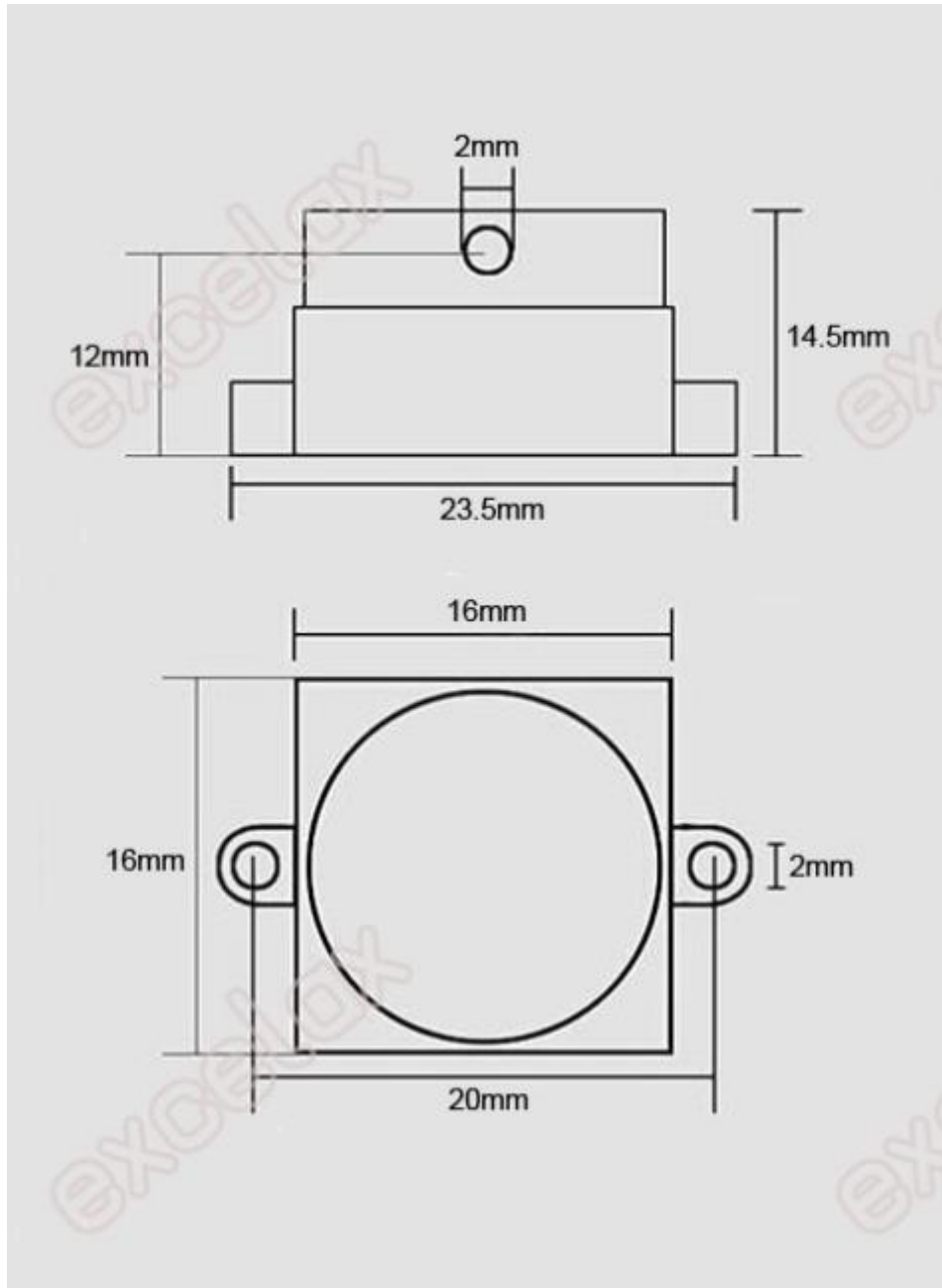
## 1.7. Lens Specification



1. Sensing Area : 1/3" CCD , 1/4" CCD
2. Focal Length : 6.0mm
3. Back Focal Length : 8.29mm
4. F NO. : 2.0
5. Iris : Fixed
6. Optical Distortion : 1/3" -10.62% , 1/4" -5.1%
7. Angle of View : (1/3" CCD) 60.0°(D), 45.1°(H), 33.7°(V)  
(7% Over Scan) (1/4" CCD) 41.3°(D), 34.5°(H), 25.7°(V)
8. Focus Extent : 40cm -  $\infty$
9. Lens Construction : 3 Components 4 Elements
10. Weight : 5.5g

<WBD2425>

## 1.8. Lens Holder specification



### 1.9. Specification

<b>Model</b>	U-Han presen : Presenmarker
<b>Image Sensor</b>	1/3 inch Wide-VGA CMOS Sensor
<b>Sensor Name</b>	On Semiconductor – MT9V034
<b>IR Filter</b>	IRCF 16*16 0.55T T50% = 650+/- 10nm
<b>Resolution</b>	Wide-VGA (752(H) x 480(V))
<b>Pixel Size</b>	6.0 x 6.0 um
<b>Frame Rate</b>	Max. 60fps@VGA
<b>Digital Interface</b>	USB 2.0
<b>Shutter Type</b>	Global Shutter
<b>Lens Mount</b>	Board mount Lens
<b>Operating Temp.</b>	-5°C ~ 40°C
<b>Storage Temp.</b>	-30°C ~ 70°C
<b>Supply Voltage</b>	USB 5V
<b>Dimension</b>	82(w) X 34(h) X 32(d) mm



### Class B Equipment (residential/domestic environments )

NOTICE This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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