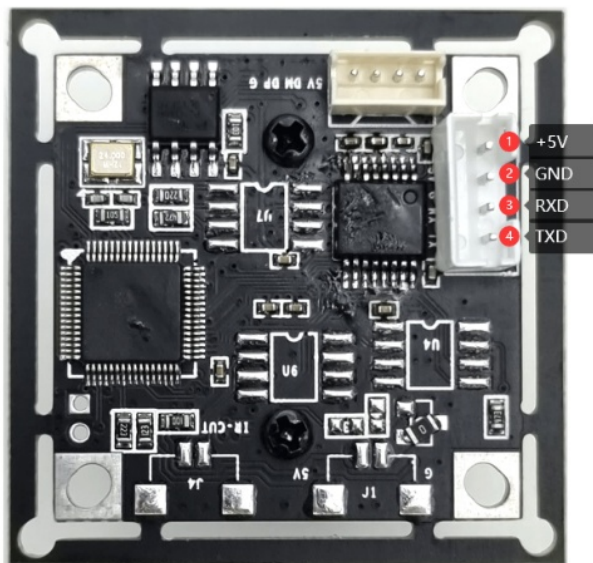


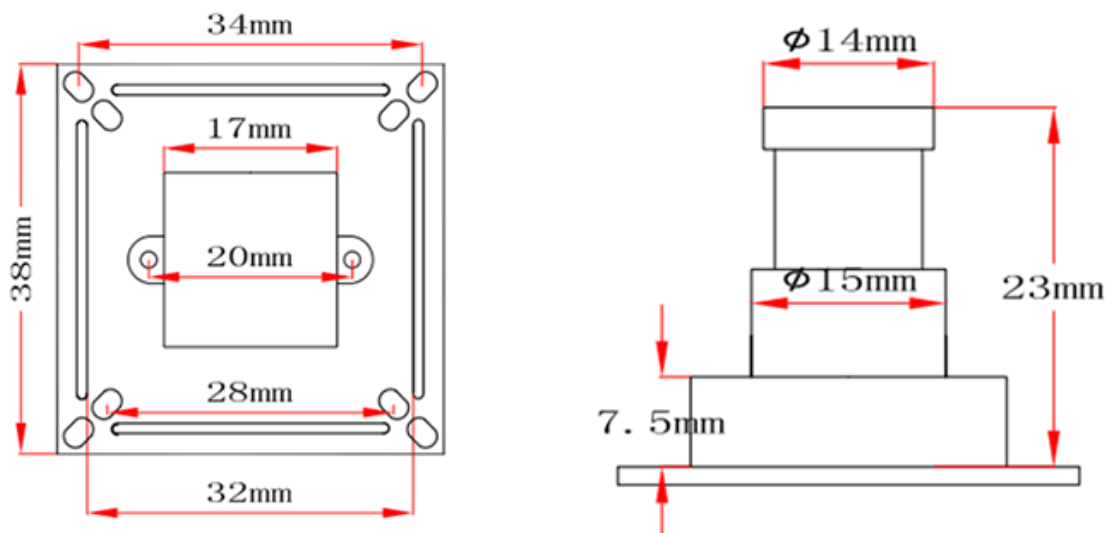
Specification

Imaging device	1/4 CMOS
Effective Pixels	704 (H) × 576 (V) / 712 (H) × 486 (V)
Photosensitive area	3.5964 x 2.7084mm
Scanning system	2:1 interlacing
Sync system	Intrasync
Clarity	300,000 pixels
Grayscale	10 grade
Electronic shutter	1/50-1/100000 (second) / 1/60-1/100000 (second)
Horizontal sync frequency	15.625KHz / 15.734KHz
Vertical sync frequency	50Hz / 60Hz
Minimum illumination	0 Lux / F1.2 (when IR is on)
Video output	1.0vp-p, 75Ω
Gamma factor	0.45
AGC	Auto
Signal to Noise Ratio	Greater than 48dB
White Balance	Auto
BLC	automatic
Image output format	JPEG
Image output size	480*320 or 320*240 (optional) 640*480
Current	80mA±10%
Voltage	DC5V±10%

Interface



Dimension



Communication Protocol

default baud rate 115200bps,

> : Send

< : Receive

Get version

> 56 00 11 00

< 76 00 11 00

Reset

> 56 00 26 00

< 76 00 26 00 00

Image Capture

> 56 00 36 01 00

< 76 00 36 00 00

Read Image length

> 56 00 34 01 00

< 76 00 34 00 04 00 00 XX YY

XX YY ----- image length, XX is high byte, YY is low byte

Read image

> 56 00 32 0C 00 0A 00 00 00 00 00 00 XX YY 00 FF

< 76 00 32 00 00 (interval time) FF D8 FF D9 (interval time) 76 00 32 00 00

Note: JPEG image files must start with FF D8 and end with FF D9

Stop taking pictures command (resume frame update) :

> 56 00 36 01 03

< 76 00 36 00 00

Command to set the compression ratio

(not save when power off)

> 56 00 31 05 01 01 12 04 XX

< 76 00 31 00 00

XX generally chooses 0x36 (range: 00 ----FF)

Image size (default size : 320*240)

> 56 00 31 05 04 01 00 19 11 (320*240)

< 76 00 31 00 00

> 56 00 31 05 04 01 00 19 00 (640*480)

< 76 00 31 00 00

> 56 00 31 05 04 01 00 19 22 (160*120)

< 76 00 31 00 00

Serial speed (No Save)

> 56 00 24 03 01 XX YY

< 76 00 24 00 00 XX YY

XX	YY	Rate(bps)
AE	C8	9600
56	E4	19200
2A	F2	38400
1C	4C	57600
0D	A6	115200

Camera Operation Process

1. Power on
2. Delay 2.5 seconds
3. Set the photo size command (set as needed, this command is not required)
4. Send a capture photo instruction
5. Send the command to read the length of the captured picture
6. Send the command to read the captured picture data
7. Finally, send the instruction to stop taking pictures