

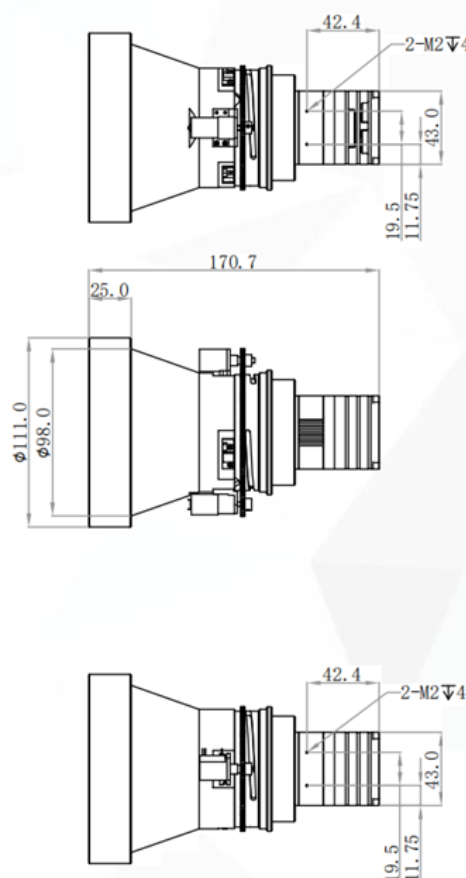
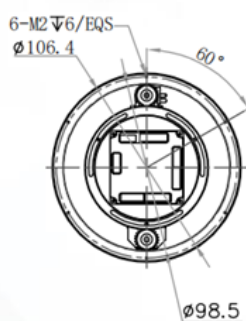
100mm Electronic Focusing Thermal Camera Module



Features

- 12μm VOx Uncooled Detector
- 640*512 @25/30fps,50Hz
- 100mm Electronic focusing lens
- NETD sensitivity ≤ 35 mK @F1.0, 25°C
- Supports Micro SD/SDHC/SDXC card storage up to 256G
- Supports network access and has rich image adjustment functions
- VISCA, PELCO-D/P
- ONVIF

Dimension



Specifications

Model	UV-TH61100EW	UV-TH61100EW-D
Detector		
Detector type	VOx Uncooled thermal Detector	
Effective Pixels	640x512	
Pixel size	12μm	
Spectral range	8-14μm	
Sensitivity (NETD)	≤35 mK @F1.0, 300K	
Lens		
Lens	100mm Electronic Focusing Lens	
F Value	F1.0@100mm	
Focusing Type	Electronic Focusing Lens	
FoV	4.4°X3.5°	
Focusing range	100mm: 10M—∞	
SEALING	IP67(front of lens)	
Network		
Network protocol	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,RTP,RTSP,RTCP,NTP,SMTP,SNMP,IPv6	
Video compression standards	H.265 / H.264	
Interface Protocol	ONVIF(PROFILE S,PROFILE G) , SDK	
Image		
Resolution	25/30fps(1920*1080,640*512,384*288)	
Image settings	Brightness, contrast, and gamma are adjustable through the client or browser	
Pseudo Color	16 modes available	
Image enhancement	Support	
Bad pixel correction	Support	
Image noise reduction	Support	
Mirror	Support	
Interface		
Network Interface	100M network port	N/A
Analog output	CVBS	
Digital output	N/A	BT.656
Communication serial port	1 channel TTL 3.3V, 1 channel RS485	
Functional interface	1 alarm input/output, 1 audio input/output, 1 USB port	
Storage function	Support Micro SD/SDHC/SDXC card (256G) offline local storage, NAS (NFS, SMB/CIFS are supported)	
Smart Function		
Basic Intelligence	Electronic fence, cross-border detection, area intrusion, leaving the area	N/A
Smart Intelligence(Optional)	Fire point detection, identification and tracking of human, vehicles and ships	N/A
Environment		
Operating temperature and humidity	-30℃~60℃, humidity less than 90%	
Power supply	DC12V±10%	
Power consumption	5.4W	2.3W
Size	170.7*Φ110mm	168*Φ86mm
Weight	740g	740g

Interface Instruction IP Version

Note 1 : Pin 1 of the connector is the pin filled in at the triangle mark in the figure;

Note 2: JP9 and JP10 are reserved zoom lens drive interfaces;

Note 3: J1 is the internal SD card function interface, which can be connected to an external TF card;

Note 4: J2 is the continuous zoom lens drive interface;

JP1 power input interface, interface MX1.25mm_2P universal connector;

JP5: Internal debugging and printing interface of the module, interface MX1.25mm_3P universal connector;

JP8 audio and video interface, interface MX1.25mm_8P universal connector;

JP4: USB2.0 interface of the movement, interface MX1.25mm_4P universal connector;

JP7 analog switch interface, interface MX1.25mm_5P universal connector;

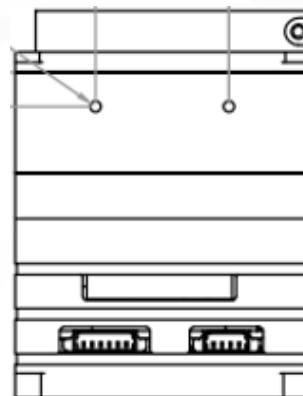
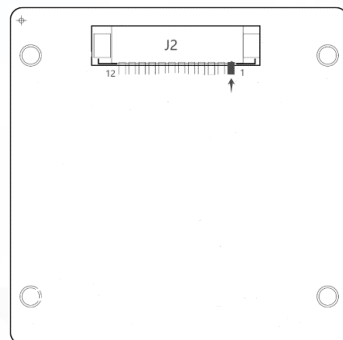
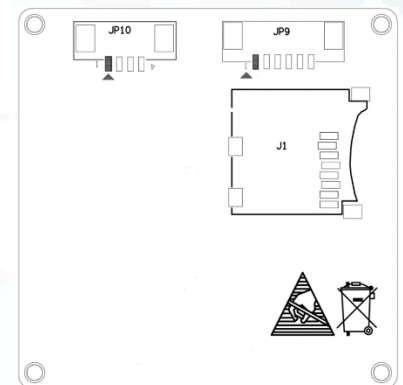
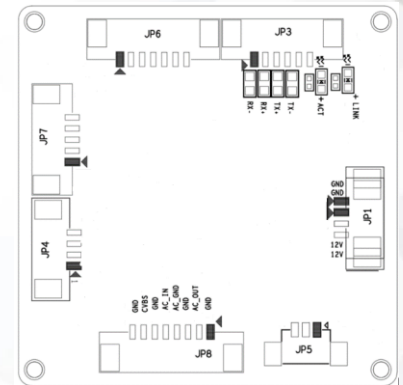
JP6 protocol communication interface, interface MX1.25mm_7P universal connector;

JP3 100M network interface, interface MX1.25mm_6P universal connector

JP10: lens motor drive interface, MX1.25mm_4P universal connector;

JP9 lens potentiometer circuit interface, interface MX1.25mm_6P universal connector;

J2: lens motor drive interface, MX1.25mm_12P universal connector;



JP1 Power	
1	GND
2	12V
JP5 Debug	
1	RXD
2	TXD
3	GND
JP8 Audio Video	
1	GND
2	LINEOUT
3	GND
4	GND
5	LINEIN
6	GND
7	CVBS
8	GND

JP4 USB2.0	
1	DC_5V
2	USB_DP
3	USB_DM
4	GND
JP4 Analog Switch	
1	ALM_OUT
2	ALM_IN
3	GND
4	SYS_RST_N

JP6 Protocol Communication	
1	VCC
2	GND
3	RS232_RXD
4	RS232_TXD
5	GND
6	RS-485-
7	RS-485+
JP3 Network	
1	TX-
2	TX+
3	RX+
4	RX-
5	LINK#
6	ACT#

JP10 Zoom Motor	
1	A+
2	A-
3	B+
4	B-
JP9 Focus Motor	
1	FOCUS_A
2	FOCUS_DP
3	GND
4	ZOOM_A
5	ZOOM_DP
6	GND

JP2 Motor Drive	
1	B-
2	B+
3	A-
4	A+
5	GND
6	GND
7	ZOOM_DP
8	FOCUS_DP
9	ZOOM_A
10	FOCUS_A
11	GND
12	Reserved

Interface Instruction Digital Version

Note 1: The triangle mark in the picture is pin 1 of the connector

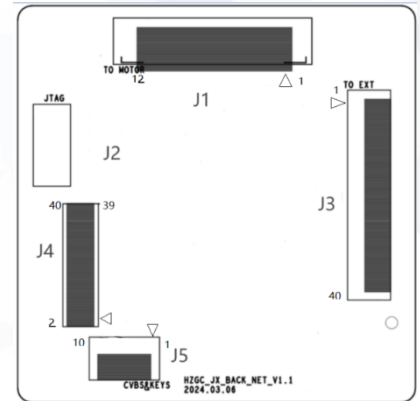
Note 2: Interface description

J1 is the continuous zoom lens drive interface, The module lens motor drive interface, interface MX1.25mm_12P universal connector; Plug reference model: DF12NB-40DS-0.5V (51), DF12NC-40DS-0.5V (51)

J3 is the external digital video output BT656 interface; (BT656 digital output signal is internally synchronized), The connector is a FPC/FCC 0.5mm pitch 40P soft row universal connector. The model can be referenced: Würth 687140182122

J4 is a reserved interface; Socket reference model: DF12NB(5.0)-40DP-0.5V(51), DF12NC(5.0)-40DP-0.5V(51); Plug reference model: DF12NB-40DS-0.5V(51), DF12NC-40DS-0.5V(51)

J5 is the analog video and button interface; The connector is a FPC/FCC 0.5mm pitch 40P soft row universal connector; the model can be referenced: Würth 687110182122



Note 3: BT656 digital output signal timing is line-by-line synchronized

Note 4: The UART interface on the interface adopts TTL level. Please add a protective circuit when using remote connection;

Note 5: The power DC input supports 5-12V. If the lens on the movement is a continuous zoom lens, it is recommended to use a DC12V/2A power supply for power supply.

J1 Lens Drive	
1	B-
2	B+
3	A-
4	A+
5	GND
6	GND
7	ZOOM_DP
8	FOCUS_DP
9	ZOOM_A
10	FOCUS_A
11	GND
12	Reserved

J3 External Video Output Interface			
1	KEY(C)	2	RS232_RXD
3	KEY(-)	4	RS232_TXD
5	KEY(F)	6	GND
7	KEY(+)	8	VCC3.3V
9	KEY(M)	10	TCK
11	GND	12	TMS
13	NULL	14	TDI
15	Reserved	16	TDO
17	VI_D0	18	GND
19	VI_D1	20	Reserved
21	VI_D2	22	Reserved
23	VI_D3	24	Reserved
25	VI_D4	26	GND
27	VI_D5	28	CVBS2
29	VI_D6	30	CVBS1
31	VI_D7	32	GND
33	CLK1	34	GND
35	Reserved	36	GND
37	Reserved	38	12V
39	Reserved	40	12V

J4 DF12N Connector			
1	NULL	2	5V
3	GND	4	5V
5	NULL	6	5V
7	NULL	8	5V
9	VI_D7	10	GND
11	VI_D6	12	GND
13	NULL	14	GND
15	NULL	16	GND
17	NULL	18	Reserved
19	NULL	20	Reserved
21	NULL	22	Reserved
23	VI_D1	24	Reserved
25	VI_D0	26	Reserved
27	CLK1	28	Reserved
29	GND	30	GND
31	VI_D5	32	UART_RXD
33	GND	34	UART_TXD
35	VI_D3	36	GND
37	VI_D4	38	CVBS
39	VI_D2	40	GND

J5 Analog & Button	
1	KEY(M)
2	KEY(+)
3	KEY(F)
4	KEY(-)
5	KEY(C)
6	GND
7	Reserved
8	GND
9	CVBS
10	GND