

UAV-CZD & UAV-CZN series HD color zoom cameras

UAV-CZD1202-N
UAV-CZD2302-N
UAV-CZD3702-N

UAV-CZN3002-H
UAV-CZN2308
UAV-CZN3708



INTRODUCTION

In response to the growing requirements for high-quality and high-resolution images that only HD can offer, Hikrobot launched UAV-CZD & UAV-CZN series HD color zoom cameras. The series can offer a range of 12x to 37x optical zoom lens and a wide variety of output (LVDS, HDMI and IP) options.

Model	UAV-CZD1202-N	UAV-CZD2302-N	UAV-CZD3702-N	UAV-CZN3002-H	UAV-CZN2308	UAV-CZN3708
Image sensor	1/2.8-type CMOS	1/1.8-type CMOS		1/2.8-type CMOS	1/1.7-type CMOS	
Lens	12x (3.9~46.8mm)	23x (5.9~135.7mm)	37x (5.7~210mm)	30x (4.5~135mm)	23x (5.9~135.7mm)	37x (5.7~210mm)
Resolution	1080P (1920 x 1080)			4K (4096 x 2160, 3840 x 2160)		
LVDS	●	●	●			
Ethernet	●	●	●	●	●	●
HDMI				●		
Camera control	VISCA (CMOS 5 V level), PELCO-D, HIKSDK			PELCO-D, HIKSDK		
Dimensions (W * H * D)	52.6*67*102.3 mm	57*67*119 mm	63*67*136 mm	50*60*97.4 mm	57*67*119 mm	63*67*136 mm



KEY FEATURES

Excellent HD image quality and focusing

Various output modes

- ◆ **HD**
 - Analog:** TVI (UAV-CZD2302-N support)
 - Digital:** Y/Cb/Cr 4:2:2 via LVDS (UAV-CZD Series support), HDMI (UAV-CZN3002-H support)
 - IP:** H.264/H.265 via Ethernet (All support)
- ◆ **SD**
 - VBS (All support)

Powerful zoom capability

There are four optical zoom lenses (12x, 23x, 30x and 37x) available, all lenses have a fast zooming capability and high durability. Besides, every block camera supports 12x digital zoom.

Strong image processing function

Highlight compensation, Backlight compensation, WDR, Noise reduction etc.

Smart functions

Motion detection and alarm, privacy zone masking.
Line Crossing Detection, Intrusion Detection (UAV-CZN Series support)

Image Stabilization

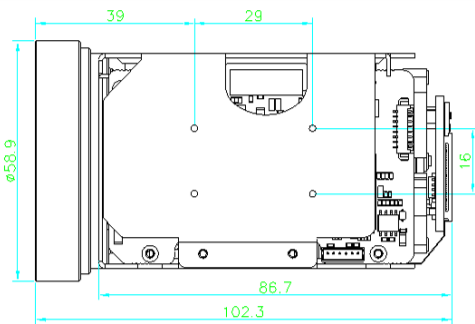
The block cameras support image stabilization function which minimizes the appearance of shaky images caused by low-frequency vibration.

SPECIFICATIONS

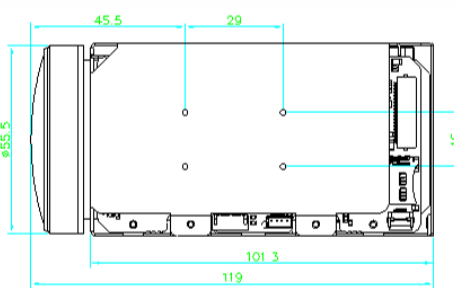
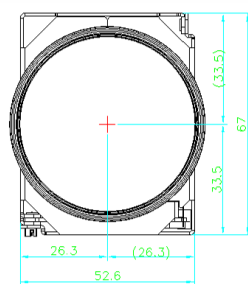
		UAV-CZD1202-N	UAV-CZN3002-H	UAV-CZD2302-N	UAV-CZD3702-N	UAV-CZN2308	UAV-CZN3708
Camera							
Image sensor	Type	1/2.8-type Exmor CMOS		1/1.8-type Exmor CMOS		1/1.7-type Exmor CMOS	
	Number of effective pixels	Approx. 2.3Megapixels		Approx. 2.1 Megapixels		Approx. 12 Megapixels	
Image size (H x V)		1920 x 1080, 1280 x 720, 720 x 480, 720 x 576				4096x2160, 3840x2160, 3072x1728, 2560x1440, 1920x1080, 1920x720	
Lens	Optical zoom	12x optical zoom	30x optical zoom	23x optical zoom	37x optical zoom	23x optical zoom	37x optical zoom
	f	f=3.9 mm (wide) to 46.8mm (tele)	f=4.5 mm (wide) to 135mm (tele)	f=5.9 mm (wide) to 135.7 mm (tele)	f=5.7mm (wide) to 210 mm (tele)	f=5.9 mm (wide) to 135.7 mm (tele)	f=5.7mm (wide) to 210 mm (tele)
	Aperture	F1.6 to F2.8	F1.6 to F4.4	F1.5 to F3.4	F1.5 to F4.5	F1.5 to F3.4	F1.5 to F4.5
	IR-Cut	No IR- Cut	IR-CUT		IR-CUT & Defog Filter	IR-CUT	IR-CUT & Defog Filter
Digital zoom		12x	12X			12X	
Angle of view (H)		72°(wide end) to 6.5°(tele end)	65.1°(wide end) to 2.34°(tele end)	59.8°(wide end) to 3.0°(tele end)	61.6°(wide end) to 2.0°(tele end)	59.8°(wide end) to 3.0°(tele end)	61.6°(wide end) to 2.0°(tele end)
Minimum object distance		10 mm (wide end) to 1,000 mm (tele end) (Default: 100 mm)					
Sync system		Internal				N/A	
Minimum illumination		Color: 0.05Lux @ (F1.6, AGC ON) B/W: 0.01Lux @ (F1.6, AGC ON)	Color: 0.05Lux @ (F1.6, AGC ON) B/W: 0.01Lux @ (F1.6, AGC ON)	Color: 0.005Lux @ (F1.5, AGC ON) B/W: 0.0005Lux @ (F1.5, AGC ON)		Color: 0.05Lux @ (F1.5, AGC ON) B/W: 0.01Lux @ (F1.5, AGC ON)	
S/N ratio		More than 52 dB					
Signal system	HD	1080p/30, 1080p/25,720p/30, 720p/25		1080p/30, 1080p/25,720p/30, 720p/25 1080p/60, 1080p/50,720p/60, 720p/50		50HZ:25fps(4096X2160), 60HZ:30fps(4096X2160) 50HZ:25fps(3840X2160), 60HZ:30fps(3840X2160)	
	SD	NTSC, PAL					
Video output	HD	Digital: Y/Cb/Cr 4:2:2 via LVDS (Signal format conforms to SMPTE296.) H.264/H.265 via Ethernet	Digital: HDMI H.264/H.265 via Ethernet	Digital: Y/Cb/Cr 4:2:2 via LVDS (Signal format conforms to SMPTE296.) H.264/H.265 via Ethernet Analog: TVI	Digital: Y/Cb/Cr 4:2:2 via LVDS (Signal format conforms to SMPTE296.) H.264/H.265 via Ethernet	H.264/H.265 via Ethernet	
	SD	VBS					
Camera control interface		VISCA (CMOS 5 V level) Baud rate: 9.6 Kbps, 19.2 Kbps, 38.4 Kbps Stop bit: 1 bit PELCO-D Baud rate: 2.4 Kbps 4.8 Kbps 9.6 Kbps (Default) 19.2 Kbps, 38.4 Kbps 57.6 Kbps, 76.8.4 Kbps 115.2 Kbps, Data bit: 8 Stop bit: 1 bit Via RS-485 HIKSDK				PELCO-D Baud rate: 2.4 Kbps 4.8 Kbps 9.6 Kbps (Default) 19.2 Kbps, 38.4 Kbps 57.6 Kbps, 76.8.4 Kbps 115.2 Kbps, Data bit: 8 Stop bit: 1 bit Via RS-485 HIKSDK	
Electronic shutter speed		1/1 to 1/30,000 s					
White balance		Auto/Manual/ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp					
Gain		Auto/Manual (-3 dB to +28 dB, +2 dB step/total 16 steps)					
AE control		Auto, Manual, Priority mode (shutter priority & iris priority)					
Focusing system		Auto, One-push AF, Manual, Infinity, Interval AF, Zoom Trigger AF					
Highlight compensation		Yes					

Backlight compensation	Yes					
Aperture control	Auto /Manual 16 steps					
Preset	255 positions					
WDR	Yes (On/Off/Auto)					
De-Fog	Yes		Yes (with Filter)	Yes		Yes (with Filter)
Auto ICR	N/A	Yes				
Spherical privacy zone masking	Yes					
Noise reduction	Yes					
Motion detection	Yes					
Alarm	Yes					
Picture effects	Yes (E-Flip, Mirror image)					
Title display	Yes (20 characters/line, max. 10 lines)					
Network						
Protocols	TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6					
System Compatibility	ONVIF (Profile S, Profile G), PSIA, CGI, ISAPI					
On-board storage	N/A	Built-in TF slot, up to 128 GB	N/A	N/A		Built-in TF slot, up to 128 GB
General						
Operating Conditions	14°F to +140°F (-10°C to +60°C) , Humidity 95% or less (non-condensing)					
Power requirements	12.0 VDC ±10%					
Power consumption	2.5 W (zoom/focus inactive) / 4.5 W (zoom/ focus active)					
Weight	270g	300g	346g	398g	346g	398g
Dimensions (W x H x D)	52.6*67*102.3mm	50*60*97.4mm	57*67*119mm	63*67*136mm	57*67*119mm	63*67*136mm

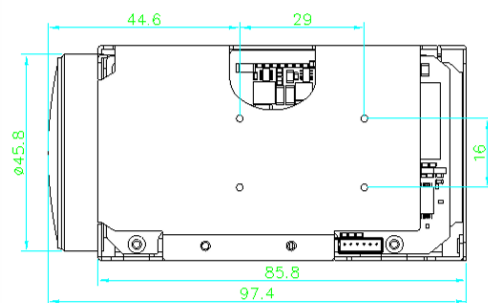
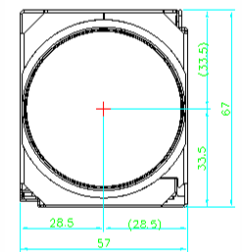
DIMENSIONS



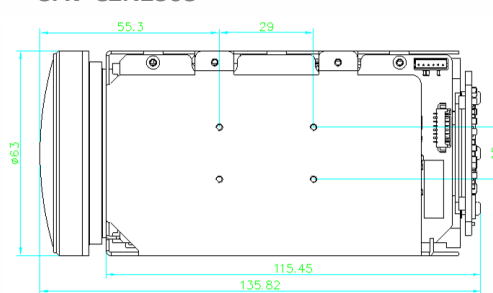
UAV-CZD1202-N



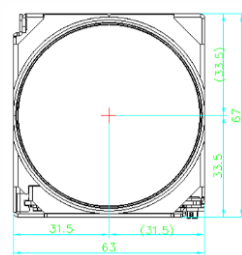
UAV-CZD2302-N
UAV-CZN2308



UAV-CZN3002-H



UAV-CZD3702-N
UAV-CZN3708

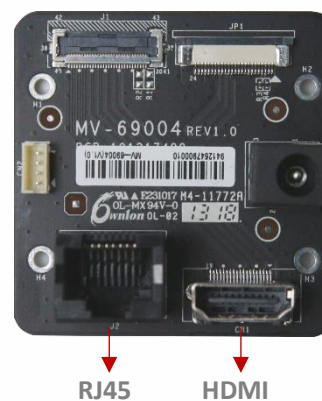


Unit: mm

INTERFACE BOARDS

Hikrobot can offer an assortment of interface boards (HDMI, SDI and RJ45) for UAV-CZD & UAV-CZN series HD color zoom cameras.

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Interface board	HDMI & RJ45, SDI & RJ45 (will be released soon)			HDMI & RJ45	RJ45 (will be released soon)	



HDMI & RJ45 interface board for UAV-CZN3002-H.

Size: 49*49mm