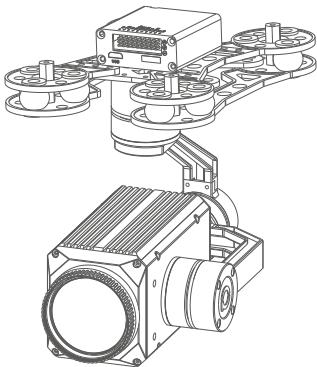




FH336 36X Optical Zoom Camera with 3-axis Gimbal (Ethernet Version)



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3-Axis Gimbal

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36X Zoom camera

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Gimbal Introduction

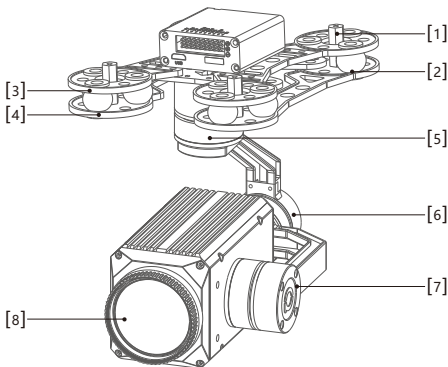
FH230 TIR with a 2-axis high precision gimbal. The 2-axis gimbal can not only be controlled via PWM signal, but also serial command. Also gimbal status like Yaw, Pitch, zoom can be obtained by sending serial command to the gimbal via its serial port.

The gimbal has 2 smart speed modes: FAST speed and LOW speed. Fast speed mode is used for small zooming range, which makes the gimbal control sensitive and quick; LOW speed mode is used for large zoom range, will enable you to target the object more accurately.

Object Tracking Function

With onboard object tracking module, FH336 TIR is able to track static or moving target easily. Just put the object you want to track in the screen, move the cursor to the object and lock it via controller, and then the camera will track it automatically.

Gimbal description



[1]Copper pillar

[2]Damper

[3]Upper damper board

[4]Lower damper board

[5]Yaw Axis Motor

[6]Roll Axis Motor

[7]Pitch Axis Motor

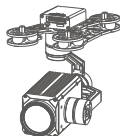
[8]HD zoom camera



Please make sure that the motor is not stopped by any object during the rotation, if the gimbal is blocked during rotation, please remove the obstruction immediately.

Packing List

Gimbal*1



Screw*1

M3*5mm half
round inner
sixangle screw *12

Lens Cover*1



Copper pillar*4



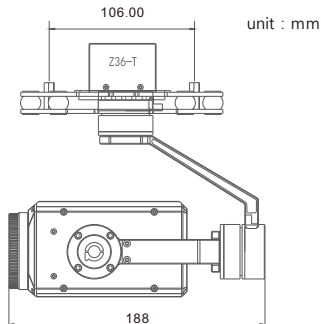
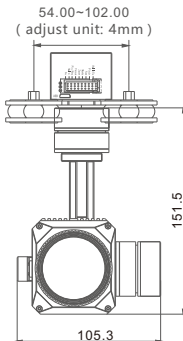
Damper*12



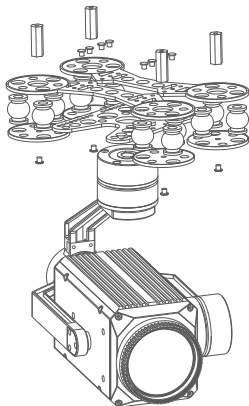
防脱落夹*12



DIMENSIONS



Installing



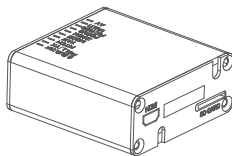
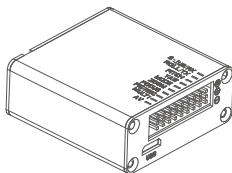
Mechanics@Electronic characteristics

voltage	3S~6S	Static	450mA@12V	Dynamic	550mA@12V
Environment	-10°C~+60°C	weight	945g	Temperature	-30°C~+80°C
Size	L105.3mm*W188mm*H151.5mm				

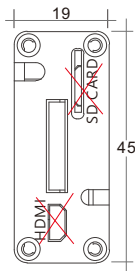
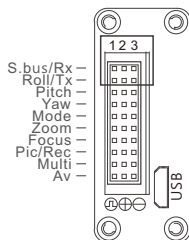
Working Characterastic

Pitch : -90°~+90° Roll: -85°~+85°
Yaw : -360°~+360°
Control Precision : Pitch/Roll : $\pm 0.01^\circ$ Yaw $\pm 0.01^\circ$

Gimbal Hub



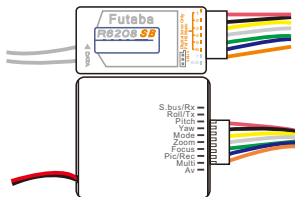
unit : mm



Rj45 Ethernet Version

Note : This is **Ethernet Version** , no HDMI output , SD CARD is at the back of the camera.

Control box wire connection



- PITCH** pitch Channel , connect 3-position switch , (Speed mode)
in the normal mode to control gimbal pitch angle, 3-position switch at high position--camera turns down, if at low position--camea turns up, and middle position--stop.
- YAW** Yaw Channel , connect 3-position switch , (speed mode)
in the normal mode to control gimbal direction , high position--turn right, low position--turn left, middle--stop.
- MODE** Mode Channel, connect knob Channel , (angle mode) ,in the normal mode to adjust gimbal yaw and pitch control speed, switch at low position--slowest,at high position-fastest, turn from middle to high position quickly and return to middle position--onekey back to center.
- Zoom** Zoom Control, connet 3-position switch: high position-zoom in, middle--stop、 low position--Zoom out.
- FOCUS** Manually adjust the focus , connect 3-position switch , (not connect default auto fucus): High position--telephoto、 middle--stop low position- closefocusing.
- PIC/rec** Pic/Rec, connect 3-position switch, Low position-taking photo,middle position--stop, high position-rec.

Zoom Camera

The 36X zoom camera provides 1080P 30FPS full HD video streaming, and the 36X zoom will help to capture every detail in distance. FH336 comes with powerful night vision capability. The camera sensor is very sensitive to IR light due to its super low illumination, which will enable you to observe objects clearly in the darkness.

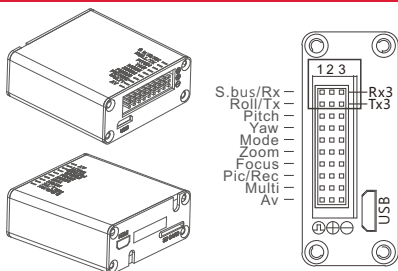
Features

- 1/1.9 inch 2.38MP CMOS sensor
- 36X optical zoom
- Ethernet output
- 1080P/30 H.264 video recorded
- Geotagging
- Super low illumination:
0.0005lux@F1.5(black/white),
0.005lux@F1.5(color),
0lux(IR)
- SNR \geq 55dB
- Support OSD
- VISUAL FX QUALITY : E-flip, Black-white, mirror image,
Image-GAMMA, Electronic through fog, D-WDR.

Specification

Type	version	FH336
	Name	36X 238 mp 1/1.9"CMOS
CMOS Sensor	image size	8.58 mm (Type 1/ 1.9)
	effective pixel	2.38 Mp
	progressive scanning	Support
	output	1920H x 1080V /25fps 1920H x 1080V /30fps
Lens	optical zoom	5.8 ~210 mm \pm 5%36 X
	focal distance	support
	field angle FOV	H:WIDE 60.00° TELE 3.70° \pm 5% V:WIDE 34.58° TELE 1.99° \pm 5%
	ApertureF No	F1. 5~F 4.8 \pm 3%

TTL Serial port control wiring instruction



Serial ports will be needed (marked by the black box, see photo above), please connect RX1 and RX2, TX1 and TX2, with wire jumper. TX and RX from external serial cable connect to TX3 and RX3 respectively. GND from external serial cable connect to GND of the wiring hub.

Note: DO NOT connect 5V and GND to the ports marked by the black box.

Datalink 1 serial port (TTL 3.3v) control gimbal and camera, including :

- 一、Yaw and angle control signal output, pitch control and angle output, speed setting, angle setting, stop, return to center etc;
- 二、Camera : Zoom, focus, recording start, recording stop, taking photo, recording/taking switch etc.
- 三、control box has no response to command, need to enter the command of checking camera, to get the status of auto focus when recording or taking photos.
- 四、Baud rate 115200, 8, 1 null