TFIP10T3
10x Optical Zoom Camera +Thermal camera 3axis Gimbal, Intergrated wireless video and control

TFIP10T3 is a 10x optical zoom gimbal camera integrating thermal camera, wireless video and data transmitter and high-precision three-axis stabilizing system. It adopts high-precision FOC control method, having advantages such as high stability, small volume, small weight, strong function. Daylight sensor has 4M effective pixels and can work under low light level. Thermal sensor uses 320*240 resolution, block slice design. It support local TF card record, dual video record synchronization, support thermal pseudo color switch, temperature measure, and the ground display and operation system support mouse control, picture in picture display. The device of air side only need power on and connect the antenna.

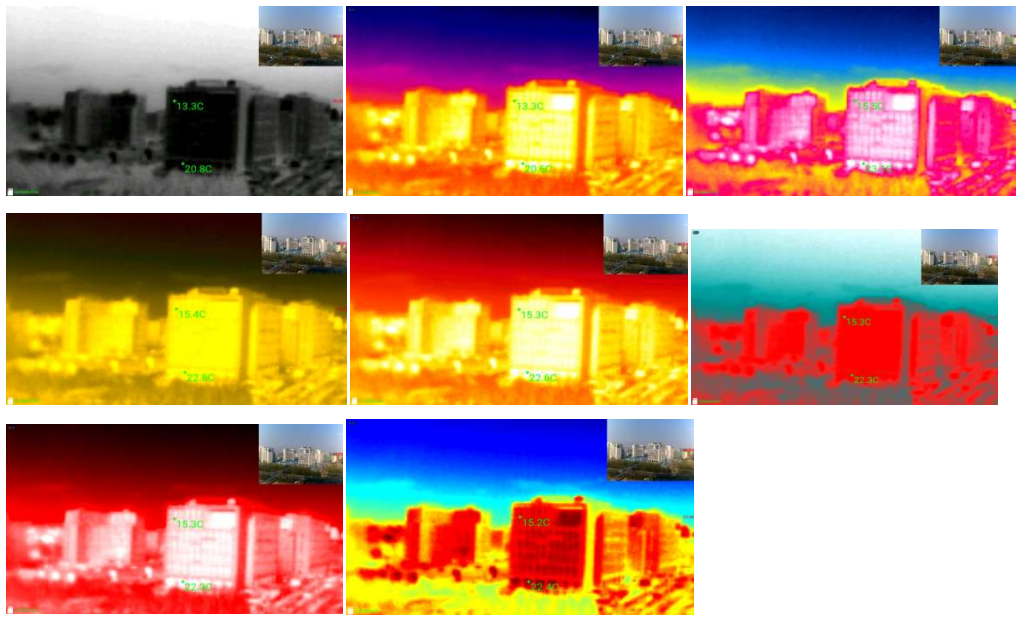Note：This device include the ground receive device and control software.

Feature

➢ 10x optical zoom +thermal

➢ Thermal pseudo color switch

➢ PIP mode display

➢ Intergrate 10Km video and data link

➢ 3 axis FOC Gimbal

➢ UART or SBUS control

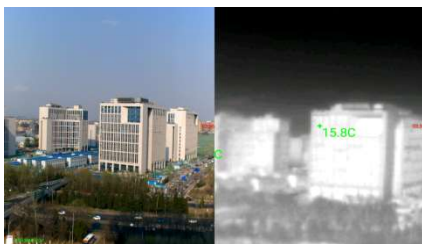➢ OSD menu setting

➢ Single TF, two video record

Struction

Antenna port

Power and control

10x zoom camera

Thermal camera

TFIP10T3

Power Supply		3S or 6S（DC12V-26V）
Power Consumption		About 12W
Working Status	Roll angel	-45°～+135°
	Pitch angel	-120~+120°
	Yaw angel	360° rotate
	Jitter Angle	Pitch Direction ±0.02°; Horizontal Direction ±0.03°
	Gimbal function	One-click restore to the initial position, support angel and speed control
	Wireless link	Frequency 806MHz-826, default bandwidth 20M (can set 5M, 10M)
	Transmitting power &distance	25dBm 10KM distance
	Transmitter mode	Bidirectional transmission, video and data in one link
	Control mode	IP directly control (UART control option)
	Feature	Ground system PIP display, pseudo color switch, temperature measure
Visible Light Camera	Sensor	1/3 4M Pixels CMOS sensor
	Zoom	10x optical zoom, f= 4.9to49 mm ±5%
	AF Time	Support quick auto focus, timelapse< 1 sec
	Video Output	RTSP 1080P 30fps IP output, Local TF record
	FOV	D : WIDE 66.6º ±5% TELE 7.2º ±5% H : WIDE 53.2º ±5% TELE 5.3º ±5% V : WIDE 39.8º ±5% TELE 4.2º ±5%
	Mode	1080P 30fps
Infrared Light Camera	Resolution	320*240 pixel
	Pix Spacing	12μm
	Type	Uncooled Micro Bolometer IR FPA Fabrication
	Wave length	8～14μm
	NETD	≤65mk@30℃
	Field Angle	6.5mm Lens; Angle: 36.4x24.2
	Measurement	Center point, highest temperature, over-temperature alert
Device Size		L150*W108*H180mm
Work Condition		-10℃ to +45℃ / 20% to 80% RH
Storage Condition		-20℃ to +60℃ / 20% to 95% RH
Function		Aerial photograph
Weight		610±20 g

Pseudo-Color Switch

Picture-in-Picture HDMI

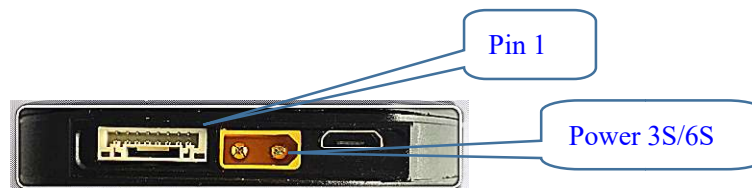Split screen   Visible light +thermal

Visible light only   Thermal + visible light

Thermal only

Connection

Pin 1

Power 3S/6S

8P Testing port signal define:

No	Part	Type	Define	Describe
1		power	GND	GND
2		power	5V	+5V output
3		signal	S/I BUS	SBUS input
4	8P port	signal	TXD4	UART4_Tx(reserve)
5		signal	DB-	IP net
6		signal	DB+	IP net
7		signal	DA-	IP net
8		signal	DA+	IP net

TOPOTEK Small Duallight Pod System

TFIP10T3 pod

10x small dual light pod TFIP10T3
- 10x optical zoom, TF record
- 320*240 thermal camera
- 3axis stability system
- 10Km wireless transmitter
- Video display and ground control

Drone side operation:
1、 Mount the pod
2、 Connect the antenna
3、 3S or 6S power on

Ground receiver

Ground video display and control

Ground side operation:
1、 Connect IP cable
2、 Receiver Power on 12V
3、 Open the software
4、 Setting the camera IP
5、 Play and control the gimbal and camera.

IP NET

12V Power

The Pod mount distance is 100mm*100cm. hole size is M2.5

*Note: Device may change structure due to product update. Please connect to topotek company to get newest datasheet.

www.topotek.com