

MINI Z10TIR

Hardware Parameter

Working voltage	12V ~ 16V
Input voltage	3S ~ 4S
Output voltage	5V (connect with PWM)
Dynamic current	550mA @ 12V
Idle current	450mA @ 12V
Power consumption	≤ 6.6W
Working environment temp.	-20°C ~ +50°C
Output	micro HDMI(HD output 1080P 60fps) / IP / Skyport (subject to actual product)
Local-storage	SD card (Up to 128G, class 10, FAT32 or ex FAT format)
Control method	PWM / TTL / S.BUS / DJI Pilot

Gimbal Spec

Pitch/Tilt	±90°
Roll	±85°
Yaw/Pan	±170° / ±360°*N (IP/Skyport output)
Vibration angle	Pitch/Roll: ±0.01°, Yaw : ±0.01°
One-key to center	√

Camera Spec

Imager Sensor	SONY sensor 1/3" CMOS
Picture quality	Full HD 1080 (1920*1080)
Effective pixel	4.08MP
Lens optical zoom	10x, F=3.2~33.6mm
Digital zoom	None
Min object distance	10mm(wide end) to 800mm(tele end)
Horizontal viewing angle	59.2°(wide end) ~ 6.7°(tele end)
Sync system	Internal
S/N ratio	more than 52dB
Min illumination	0.5 lx (1/30s, F1.8, 50%)
Gain	Auto / Manual
White balance	ATW1 (Narrow), ATW2 (Wide), single touch, manual (B, R)
Shutter speed	1/1s to 1/10,000s
Backlight compensation	Yes
Aperture control	16 steps
OSD	Yes
Fotoformate	JPEG
Videofomate	MP4

Camera Object Tracking

Update rate of deviation pixel	50Hz
Output delay of deviation pixel	<10ms
Minimum object contrast	5%
SNR	4
Minimum object size	16*16 pixel
Maximum object size	160*160 pixel
Tracking speed	±32 pixel/frame
Object memory time	100 frames (4s)
The mean square root values of pulse noise in the object position	< 0.5 pixel

Thermal imager spec

Lens size	19mm
Horizontal FOV	32°
Vertical FOV	24°
Diagonal FOV	39.4°
Detective Distance (Man: 1.8x0.5m)	559 meters
Recognize Distance (Man: 1.8x0.5m)	140 meters
Verified Distance (Man: 1.8x0.5m)	70 meters
Detective Distance (Car: 4.2x1.8m)	1714 meters
Recognize Distance (Car: 4.2x1.8m)	428 meters
Verified Distance (Car: 4.2x1.8m)	214 meters
Working mode	Uncooled long wave (8μm~14μm) thermal imager
Detector pixel	640*480
Pixel size	17μm
Focusing method	Athermal prime lens
Emissivity correction	0.01~1
NETD	≤50mK (@25°C)
MRTD	≤650mK (@characteristic frequency)
Image enhancement	Auto adjust image brightness and contrast ratio
Color palette	White, iron red, pseudo color
Auto Non-uniform correction	Yes (no shutter)
Digital zoom	1x~4x
Sync correct time	Yes
Thermometry type	Not support
Temperature warning	0°C~100°C

Thermal Object Tracking

Update rate of deviation pixel	25Hz
Output delay of deviation pixel	<3ms

Minimum object size	16*16 pixel
Maximum object size	128*128 pixel
Tracking speed	±32 pixel/frame
Object memory time	100 frames (4s)

Packing Information

N.W.	490g
Product meas.	118*109*120mm
Accessories	1pc gimbal camera device, 16pcs screws, 4pcs copper cylinders, 12pcs damping b plastic box with foam cushion