# TFN TD 97 binocular handheld thermal imager



TFN TD97 Is a High-quality Product Designed and Produced According to Scientific Ergonomic Structure by Adopting International Advanced High Sensitivity Uncooled Infrared Focal Plane Detector, Excellent Imaging Circuit Components and Optimized Optical Systems. This Product Has Good Infrared Imaging Effect, Small and Light Size, Low Power Consumption, Simple Control, Light and Portable Appearance Structure, Good Grip Hand Feeling, High-Resolution Infrared Sensor, Ultra-Low Power Consumption, quick Start, Simple Control, Compact and Stable Structure.

TFN TD97 Is a Product with Medium and Long Distance Performance Using Long Focus Lens. It Can Be Used for Handheld Or Fixed Observation, Night Reconnaissance, Evidence Collection and Target Search, and Has the Function of Taking Photos/Video Evidence Collection, video Images Can Be Recorded for a Long Time. The Product Uses a Single Built-in Rechargeable Battery, and the Continuous Working Time Can Reach 6 Hours. In Addition, It Has Advanced Quick Start Performance and Will Not Interrupt Or Freeze Images Due to Correction Operation, Thus Significantly Improving the Quick Response Capability of Users.

#### I. Product Features

It has the functions of photographing and video obtaining evidence, and can record video images for a long time.

Single built-in rechargeable battery, continuous working time up to 6 hours

Highly sensitive uncooled infrared focal plane detector, excellent imaging circuit components and optimized optical system

Small and light size, low power consumption, simple control, light and portable appearance structure, ergonomic structure

Ultra-low power consumption, fast start-up, simple control, compact and stable structure, suitable for harsh battlefield environment

### II. Application fields

It Plays a Role in Anti-Terrorism, Investigation, Border Defense, Anti-Drug Night Vision, Border Patrol, Border Inspection Station Monitoring, Water Search and Rescue, Prison Monitoring, Night Vision Patrol and Epidemic Prevention.

## III. Technical parameters

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Eyepiece

Product Model	TFN TD97
Detector type	Uncooled focal plane
Detector specifications	640×480@17μm
Working Band	$8 \sim 14 \mu m$
Frame rate	50Hz
Sensitivity	< 60mK@300k

800 × 6000LED binocular micro display

# Image processing

Imaging time	<5 seconds
Image noise reduction	Digital filtering
Image adjustment	Automatic/manual adjustment
Electronic zoom	×2/×4
Optical parameters	
Lens focal length	75mm/F1.0
Field angle	8.3°×6.2°
Focusing mode	Manual
Functions and storage	of photographing and video recording
Photographing function	JPEG format photo
Video recording function	MPEG 4 format video
Record Storage and outp	ut Record format 640 × 480

(Optional) Built-in 16G card; USB 2.0 interface output

# Observation distance Personnel (1.7 mx0.5 m) Detection: 2.0km identification: 0.7km Vehicle (2.3m × 2.3m) Detection: 3.5km identification: 1.5km Power parameters Power supply A 26650 rechargeable lithium battery 3.7V @ 5000mAh; Operating voltage range DC: +2.8V~+5.0V Normal operating power consumption <3.0W Working hours Continuous working hours: ≥ 6 hours **Environment physical parameters**

Sweep frequency 5-200-5Hz, acceleration 2.5g

30g/11Ms half sine wave

<1.2kg (excluding battery)

220 (L) ×170 (W) ×85 (H)

-40°C ~ +60°C

-30°C ~ +50°C

Product protection level IP66

Anti-vibration

Impact resistance

Product Weight

Overall size (mm)

Storage Temperature

Operating temperature



## Binocular handheld thermal imaging



- Equipped with photography, video recording and evidence collection functions, capable of long-term recording of video images
- A single built-in rechargeable battery can work continuously for up to 6 hours;
- Highly sensitive uncooled infrared focal plane detectors, high-performance imaging circuit components, and optimized optical systems
- Compact and lightweight, low power consumption, simple operation, lightweight and portable ergonomic structure
- Ultra low power consumption, fast start, simple operation, compact and stable structure, suitable for use in harsh battlefield environments





Overall size (mm)



220 (L) x170 (W) x85 (H)

#### Product parameters

Electron

	parameters			
	Model		TD97	
	Detector type		Uncooled focal plane	
	Detector specifications		640x480@17µm	
	W	orking band	8~14µm	
	Frame rate sensitivity		50hz	
			< 60mK@300k	
	eyepiece		800x6000LED binocular micro display	
		Imaging time	<5 seconds	
im	age	noise reduction	digital filtering	
proces	ing	adjustment	Automatic/manual adjustment	

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000	rear paramiteters			
	focal length	75	mm/F1.0	- 11
Field of view angle		8.	3°×6.2°	
	Focus Mode	ha	and movement	Nor
Pho			ng function and storage	
	Photograph function	У ЈР	EG format photos	
	Recording function Record storage and output (optional)		PEG4 format video	
			ecord format 640 × four indred and eighty iilt-in 16G card: USB20 terface output	Envir men physi
Ob:	servation distar	ıce	p	aramet
	(1.7mx0.5m) Vehicle (2.3mx2.3m)		Detection: 2.0km Ident cation: 0.7km	ifi-
			Detection: 3.5km Ident cation: 1.5km	ifi-

Optical parameters

Power parameters Power A: supply		A 26	3.7V@500mAH	
	Operating oltage range	DC: +2.8V~+5.0V		
lorma wer c	operating onsumption	<3.0	)W	
	working hours		ontinuous working time: ≥ 26 hou	
	Product protection level		Ip66	
nviron- nental nysical meters	Anti vibration		Sweep frequency 5-200-5Hz, acceleration of 2.5g	
	resistance		30g/11ms half sine wave	
	s temperature		-40°C~+60°C	
	Operating temperature		-30°C~+50°C	
	Product weight		< 1.2kg (excluding battery)	