

DHI-TPC-M40

Thermal Monocular Camera





- · Vanadium oxide uncooled focal plane detector.
- · Ultra-low power consumption.
- · Fire detection and alarm.
- · Connects to the mobile app through Wi-Fi.
- Connects to the external display through the CVBS port.
- · Provides a laser for aiming.
- · Calculates distance using video analysis.
- · Lightweight and portable.
- IP67 rated.

Series Overview

M40 captures sharp thermal imaging at a fast framerate for smooth, impeccable vision on running targets and from moving vehicles. Designed to increase situatonal awareness at any tme of day, M40 can detect humans, animals, and objects in complete darkness, haze, or through glaring light, equipping law enforcement professionals, hunters, and outdoor enthusiasts with reliable thermal imaging in tough conditons.

Functions

Advanced Image Processing

Designed to be precise, this thermal camera produces vivid video images through its enhanced detector and Dahua-developed image processing algorithm.

Video Ranging

With its hassle-free distance measurement feature, simply mark the top and bottom of a target on the screen, and the interface will automatically display the distance of the target from the monocular.

Fire Detection

Fire detection is now available for the first time with this monocular through Dahua's core technology. The monocular can automatically detect fires that break out in the scene and track them in real time.

Simultaneous Multi-user Connections

Multiple phones can connect to the monocular through the Wi-Fi at the same time. Through the mobile phone, you can watch the live view, capture images, record videos and configure parameters.

Diopter Adjustment

By adjusting the diopter adjustment knob, the thermal camera can be set to match the eyesight of different users, ensuring that each user sees a clear image.

Laser Eye Protection

The laser pointer is used to indicate a position. To protect the eyes from being injured, the laser pointer is automatically disabled after 10 s.

Portable and Low Power Consumption

With its small and lightweight design, it functions for longer periods while remaining fully charged, making long-term outdoor use more convenient.

Scene

Widely used in outdoor scenarios for hunting, rescue, animal observation, and more.

Technical Specification

General

Appearance	Thermal Monocular Camera
Туре	Monitor

Thermal

Detector Type	Vanadium oxide uncooled focal plane detector
Effective Pixels	400 (H) × 300 (V)
Pixel Pitch	17 μm
Spectral Range	8 μm–14 μm
Sensitivity (NETD)	≤50 mK@f/1.0
Aperture	F1.0
Focal Length	13 mm; 19 mm; 25 mm
Field of View	13 mm (H: 24.0°; V: 22.6°) 19 mm (H: 20.4°; V: 15.3°) 25mm (H: 15.5°; V:11.6°)
Focus Control	Fixed-focal

Close Focus [Distance	13 mm 3 m (9.84 ft) 19 mm 5.8 m (19.02 ft) 25 mm 9.5 m (31.16 ft)			
DRI Detection Distance	Thermal Focal Length	Detection Distance	Recognition Distance	Identification Distance	
	13 mm	Vehicle: 1020 m (3,346.45 ft) Human: 382 m (1,253.28 ft)	Vehicle: 255 m (836.61 ft) Human: 98 m (321.52 ft)	Vehicle: 128 m (419.94 ft) Human: 49 m (160.76 ft)	
	19 mm	Vehicle: 1490 m (4,888.45 ft) Human: 558 m (1,830.70 ft)	Vehicle: 372 m (1,220.47 ft) Human: 143 m (469.16 ft)	Vehicle: 186 m (610.23 ft) Human: 72 m (236.22 ft)	
	25 mm	Vehicle: 1960 m (6,430.44 ft) Human: 735 m (5,692.25 ft)	Vehicle: 490 m (1,607.61 ft) Human: 189 m (620.07 ft)	Vehicle: 245 m (803.80 ft) Human: 94 m (308.39 ft)	
Thermal Digi	Thermal Digital Zoom				
Color Palettes		4 (white hot/alarm/rainbow/iron red)			
Display					
Video Compression		H.265			
Frame Rate		50 Hz			
Display Screen Dimensions		0.4 inch			
Resolution	Resolution		1280 (H) × 960(V)		
Function	Function				
Storage		Micro SD card (Max. 256 G)			
Laser Aiming		180 m (590.55 ft), Class 2 (IEC 60825-1)			
Buzzer	Buzzer		Yes		
Intelligend	Intelligence				
Fire Detectio	n	Yes			
Cold/Hot Spo	ot Trace	Yes			
Port					
Analog Outp	ut	1 × CVBS output			
Wi-Fi Hotspo	t	Yes			
USB		Micro USB			
Power					
Power Supply	У	5 VDC, 0.5 A or built–in battery			
Battery Capa	city Display	Yes			
Power Consu	ımption	<2.2 W			
Battery Life		>5 h (Wi-Fi hotspot off, @25°C)			
Charging Tim	Charging Time		<3 h		

Environment

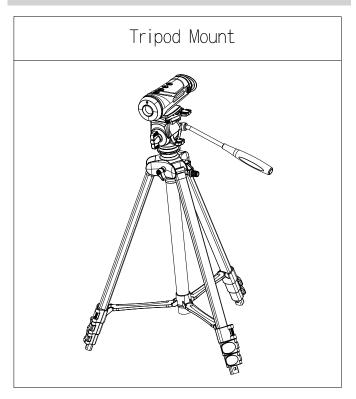
Operating Temperature	-20 °C to +55 °C (-4 °F to +131 °F)
Operating Humidity	≤90%
Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)

Physical Characteristics

Protection	IP67
Operating Temperature	187.5 mm \times 66.5 mm \times 68.5 mm (7.38" \times 2.61" \times 2.69") (L \times W \times H)
Packaging Dimensions	228 mm \times 186 mm \times 124 mm (8.97" \times 7.32" \times 4.88") (L \times W \times H)
Net Weight	450 g (0.99 lb)
Gross Weight	1.1 kg (2.42 lb)
Installation	Handheld; tripod
Power Adapter	Included
Lens	Included
Bracket	Optional
Drop Test Height	2 m (6.56 ft)

Ordering Information Туре Model Description DHI-TPC-M40-B13-Y Lens: 13 mm; Color: Yellow DHI-TPC-M40-B19-Y Lens: 19 mm; Color: Yellow DHI-TPC-M40-B25-Y Thermal Lens: 25 mm; Color: Yellow Monocular DHI-TPC-M40-B13-G Camera Lens: 13 mm; Color: Black DHI-TPC-M40-B19-G Lens: 19 mm; Color: Black DHI-TPC-M40-B25-G Lens: 25 mm; Color: Black

Installation



Dimensions (mm[inch])

