

## DS-2TS16-50VI/W Handheld Thermal & Optical Bi-spectrum Binocular



Hikvision DS-2TS16-50VI/W Handheld Thermal & Optical Bi-spectrum Binocular is equipped with ultra-low light optical detector, 640 × 512 @25fps thermal detector, 1280 × 960 @25fps OLED display and eyepiece with large field of view. The device can quickly discover and locate hiding objects even under extreme environment, such as smoke, fog, rain and snow. It can be widely applied to scenarios like patrol, law enforcement, search and rescue, drug enforcement, anti-smuggling and suspect capture.

### Key Features

- Thermal: 640 × 512 @25fps, optical: 1280 × 960 @25fps
- Adaptive AGC, DDE, 3D DNR, NETD less than 40 mk (25°C, F#=1.0)
- Ultra-low illumination (optical channel), B/W: 0.001 lux @ (F1.0 , AGC On )
- 0.39-inch OLED display
- Automatic OLED backlight
- Manual focus for thermal lens
- Bi-spectrum image fusion and object highlight (detail enhancement and target recognition)
- Video recording, replay, picture snapshot and search (capable to review the event on device)
- Wi-Fi hot spot, GPS, cursor display



## Specification

Thermal Module	
Image Sensor	Uncooled Focal Plane Arrays
Max. Resolution	640 × 512 @25fps
Pixel Interval	17μm
Response Waveband	8μm to 14μm
NETD	less than 40 mk (25°C, F#=1.0)
Lens (Focal Length)	50 mm, Manual Focus, Electric focus
MRAD	0.34 mrad
Field of View	12.42° × 9.95° (H × V)
Digital Zoom	4×
Aperture	F1.0
Optical Module	
Max. Image Resolution	1280 × 960 @25fps
Image Sensor	1/3" Progressive Scan CMOS
Min. Illumination	B/W : 0.001 lux @ (F1.0 , AGC On)
Lens (Focal Length)	12 mm
Image Enhancement	3D DNR, Adaptive AGC
Image Display	
Monitor	0.39-inch, OLED, 1024 × 768
Thermal/Optical Mode	Thermal view, B/W optical view, image fusion view are selectable
Image Fusion	Color fusion, B/W fusion
Pallets	Black hot, white hot
Smart Function	
Hot Track	Yes
Object Highlight	Yes
Automatic Backlight	The OLED backlight automatically turns off if no human eyes are detected.
Cursor Display	A cursor shows in the view for roughly measuring distance from the target.
System	
Storage	Built-in memory module (32GB)
Record Video	On-board video recording
Snapshot	On-board image capturing
Video Replay	Yes
Picture Search	Yes
Wi-Fi	Yes
GPS	Yes

<b>Power Supply</b>	
Battery Type	Four 18650 batteries, requires 5 hours to be fully charged
Battery Operating Time	More than 7 hours
Battery Capacity Display	Yes
<b>General</b>	
Menu language	English
Power	DC 5V/2A
Working Temperature	-30 °C to 55 °C (-22 °F to 131 °F)
Protection Level	IP67
Mounting	UNC 1/4"-20
Cable Output	Aviation plug: connecting to BNC, DB9, and USB
Accessories (Supplied)	Battery charger, battery charger power cable, wiping cloth, two wrist straps, User manual, aviation plug cable, eight batteries
Dimension	164mm × 182.3mm × 73.3mm (6.46" × 7.18" × 2.89")
Weight	Less than 1.0 Kg (2.20 lb)

## Detection Range Table

\* The table is only for reference, the performance may vary from camera to camera.

### Wide Range Coverage

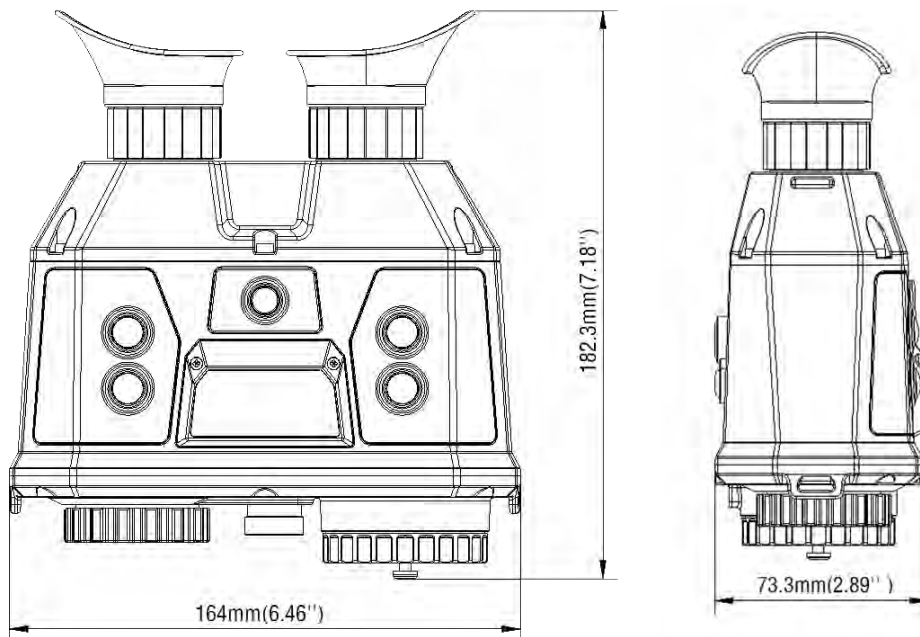
There is range limit for detecting, recognizing, and identifying human/vehicle targets.

Detection Range (Vehicles: 1.4×4.0m)	Detection Range (Humans: 1.8×0.5m)	Recognition Range (Vehicles: 1.4×4.0m)	Recognition Range (Humans: 1.8×0.5m)	Identification Range (Vehicles: 1.4×4.0m)	Identification Range (Humans: 1.8×0.5m)
4510 m	1471 m	1127 m	368 m	564 m	184 m

### Available Model

DS-2TS16-50VI/W

### Dimension



Distributed by

**HIKVISION****Headquarters**

No.555 Qianmo Road, Binjiang District,  
Hangzhou 310051, China  
T +86-571-8807-5998  
overseasbusiness@hikvision.com

**Hikvision USA**  
T +1-909-895-0400  
sales.usa@hikvision.com

**Hikvision Australia**  
T +61-2-8599-4233  
salesau@hikvision.com

**Hikvision India**  
T +91-22-28469900  
sales@pramahikvision.com

**Hikvision Canada**  
T +1-866-200-6890  
sales.canada@hikvision.com

**Hikvision Thailand**  
T +662-275-9949  
sales.thailand@hikvision.com

**Hikvision Europe**  
T +31-23-5542770  
sales.eu@hikvision.com

**Hikvision Italy**  
T +39-0438-6902  
info.it@hikvision.com

**Hikvision Brazil**  
T +55 11 3318-0050  
Latam.support@hikvision.com

**Hikvision Turkey**  
T +90 (216)521 7070- 7074  
sales.tr@hikvision.com

**Hikvision Malaysia**  
T +601-7852-2413  
sales.my@hikvision.com

**Hikvision UK & Ireland**  
T +01628-902140  
sales.uk@hikvision.com

**Hikvision South Africa**  
Tel: +27 (10) 0351172  
sale.africa@hikvision.com

**Hikvision France**  
T +33(0)1-85-330-450  
info.fr@hikvision.com

**Hikvision Kazakhstan**  
T +7-727-9730667  
nikia.panfilov@hikvision.ru

**Hikvision Vietnam**  
T +84-974270888  
sales.vt@hikvision.com

**Hikvision UAE**  
T +971-4-4432090  
salesme@hikvision.com

**Hikvision Singapore**  
T +65-6684-4718  
sg@hikvision.com

**Hikvision Spain**  
T +34-91-737-16-55  
info.es@hikvision.com

**Hikvision Tashkent**  
T +99-87-1238-9438  
uzb@hikvision.ru

**Hikvision Hong Kong**  
T +852-2151-1761  
info.hk@hikvision.com

**Hikvision Russia**  
T +7-495-669-67-99  
saleru@hikvision.com

**Hikvision Korea**  
T +82-(0)31-731-8817  
sales.korea@hikvision.com

**Hikvision Poland**  
T +48-22-460-01-50  
info.pl@hikvision.com

**Hikvision Indonesia**  
T +82-21-2933759  
Sales.Indonesia@hikvision.com

**Hikvision Colombia**  
sales.colombia@hikvision.com